

**CRANFIELD UNIVERSITY**

**SCHOOL OF MANAGEMENT**

**PHYSIOTHERAPY AS A PROFESSION**

Academic year 1994/95

**RITA AWUNOR-RENNER**

**PhD THESIS**

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## ABSTRACT

This case study of the physiotherapy profession is practitioner research, undertaken in the unique research role in which the researcher was also the manager of the organisation being researched and a member of the profession being researched.

The dual aim of the study was to contribute to the theory of professions, as well as the practice of managing a profession in the context of an organization (the NHS). The theoretical aim was fulfilled by establishing the "specific pattern of profession" of physiotherapy; its practical contribution was the identification of factors of a management model which were critical to implementing professionalism in the organizational context of the NHS. The factors were: "diffuse organization" in "highly organic, fluid and self-generating" specialist team structures, located at the middle stratum of the organization, which gives the incumbents of "technical" (clinical) knowledge a role on shaping the context to clinical work (in operational and strategic planning). This new professional role of "research-orientated managing clinician" includes the evaluation of work based on research and other investigative procedures.

This was at a time when the state bureaucracy's interests coincided with the profession's interests in establishing professional autonomy in physiotherapy and a professional type of knowledge and skill system. Guided by the concept of profession proposed by Kocka and Torstendahl (1990), this case study identified the details of professional knowledge and skill systems and constructed a physiotherapy-specific typology of knowledge and skills (based on the literature about professional knowledge systems and interviews). The typology was used to test the knowledge and skill base in physiotherapy practice by in-depth interviews.

Research methods were both conceptual as well as empirical. The empirical part was predominantly based on a qualitative approach through in-depth interviews. The data was supplemented by documentary evidence and my observations as a participant observer.

The study contributes to our knowledge and understanding of the physiotherapy profession and the new concept of profession by establishing the specific pattern of profession for physiotherapy. The role of "organization" (a "professional resource" in the actor-based framework) was found to be critical for the implementation of professionalism in practice. "Organization" was specified on the basis of this case study as "organic, fluid and self-generating". New knowledge and skill categories were identified in this study. These categories were: breadth of knowledge, the ability to generalise from the technical to non-technical domains ("knowledge and skill transfers"), "organic" type of communication and confidence. The study also contributes to our understanding of the research methods of practitioner research from this unique triple role.



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## **CHAPTER ONE**

### **THE MANAGEMENT PROBLEM - A PROMPT TO RESEARCH**

Organizational setting and policy context.

Local management initiatives to promote quality of service and professionalism in physiotherapy.

Management initiative: the physiotherapy education program.

Management initiative: re-structuring into specialist teams.

Management initiative: "development planning".

Organisational structures.

Summary, discussion and insights - the next step.

This research project began with a management problem faced by many newly-appointed managers. It was the problem of how to change an ailing organisation into a "good" one. In 1985 the appointing health authority's initial brief to me, the newly appointed district physiotherapist, had been to "improve the physiotherapy service". The exact nature of what is a "good" or "bad" physiotherapy service was not discussed at the time of my appointment. It was however clarified over the first two years in post, well before my work became formally registered as a research project at the former Department of Social Policy at the then Cranfield Institute of Technology in 1987.

During these two years from 1985 to 1987 I attempted to solve my management problems in an intuitive way, relatively uninformed by theories of management. The initial management actions described in this chapter were documented, but not with the stringency of a research project. My observations of my own managerial problem-solving are therefore a retrospective of the way in which I acted as a newly appointed manager - and needs to be read as such. Included in my description of events are the ideas which influenced me at that time and how these ideas contributed to the eventual formulation of the research problem. This was the root for my problem-solving type of research in the field of management.

It was clear from the beginning that the ideas which influenced my first attempts to change the service had something to do with the advent of professionalism in physiotherapy, expressed in policy changes of the late seventies and eighties. These policy changes, which focussed on two dimensions - knowledge and decision-making in physiotherapy - influenced how I thought about and solved my initial management problems. Knowledge

and decision-making were later chosen as the key dimensions of the study, including the question of how to structure decision-making in physiotherapy.

Knowledge and decision-making in physiotherapy will also be discussed in chapters three, six and seven. But there the discussion will be from the perspective of a researcher, rather than being based on the intuitions and rationalizations of a manager. The manager's intuitive observations of the worksetting will move to the systematic observations of a researcher. Intuitive interpretations of observations will become more informed by management theories.

Typically, in problem-solving type of research in the field of management, the initial questions raised during the problem-solving phase tend to become modified - or may not even remain the focus of the study (Easterby-Smith 1991; Sekaran 1984). My study moved from focussing on increasing knowledge and expertise in physiotherapy through training and greater involvement in decision-making to specifying the knowledge base for a professional role in physiotherapy. The study returns nevertheless to its problem-solving roots by exploring the implications of its findings for today's changes in the National Health Service.

The introductory section of this thesis ("Orientations") consists of two chapters which describe my initial management problem (chapter one) and an initial inquiry into decision-making in physiotherapy (chapter two). These initial "orientations" led to a more conceptual stage ("Initial Studies and Conceptualizations") which contain a discussion of the concept and theories profession in chapters three and five, as well as analyses of physiotherapy knowledge and policy in chapters six and seven.

### **The organizational setting of the study and its policy context**

I was appointed to be the senior manager of a district-wide physiotherapy service in 1985 following health circular HC79(19) which recommended self-management in physiotherapy by creating the district physiotherapist post. The former Department of Health and Social Security (DHSS) had felt that "clinically-related services" such as physiotherapy, occupational therapy, speech therapy, chiropody, psychology, pharmacy and orthoptics lacked co-ordination across a health district, and should therefore be managed by a senior manager from the respective profession. Better co-ordination of services via "functional managers" with a district-wide management remit was seen as a means to greater efficiency and better quality of clinical care.

For physiotherapy, like some of the other clinically-related services, the district manager posts were simultaneously a step towards professional autonomy, following a long struggle with the medical profession over clinical and managerial autonomy. This long struggle, described in more detail in chapter four, influenced my initial management agenda and what I perceived to be a problem worthy of investigation.

The local physiotherapy service to which I had been appointed reflected the DHSS' concerns about the lack of quality of these clinical services. Lack of co-ordination was a problem. However, the service had more fundamental problems well beyond the "finer point" of lack of co-ordination. There was a serious lack of fundamental resources in terms of accommodation, equipment and staff, including staff who were able to manage the service.

Accommodation was poor because the district general hospital had no rehabilitation department at the main hospital site. In-patients were therefore either rehabilitated in the hospital ward where the lack of specialist physiotherapy equipment made rehabilitation more difficult and tiring for patients and staff. For example, special plinths for stroke patients make it easier for stroke patients to regain lost movement. "Making this easy" for patients is important because these patients tire easily.

Patients considered well enough to travel, were transported to the nearest out-patient physiotherapy department outside the main hospital. This practice was inefficient and dangerous. Stroke patients could have suffered a second stroke during their lengthy journey without any emergency medical help being available.

A local survey of transit times and treatment times showed that these patients were absent from the wards for two hours, but received treatments lasting ten minutes only. The duration of the treatment was totally inadequate given the seriousness and complexity of the medical conditions being transported to the out-patient department.

Lack of rehabilitation equipment was the second major resource problem. All of the four major physiotherapy departments lacked modern physiotherapy equipment. I have already explained how this made rehabilitation more difficult for patients. But another major disadvantage was that the staff having to move from ward to ward or to the out-patient department wasted valuable staff time in an already under-staffed service.

Staffing levels and the quality of staff recruited were the third major resource problem. The health authority had found it difficult to recruit physiotherapists so that one third of the

posts were vacant for a period of over six months. (Staffing levels will be shown in a "family tree of the organization" in the later section on "Restructuring into specialist teams" in this chapter.)

Another staff problem was the scarcity of senior physiotherapist posts. For example, at the district general hospital site only two physiotherapists out of a staff of eighteen were senior 1 clinicians (shown in "Restructuring into specialist teams"). This meant that the degree of expertise applied in clinical work was low. Senior physiotherapists have higher levels of expertise than basic grade staff. In accordance with Whitley Council regulations, physiotherapists can only be employed as senior physiotherapists if they are experienced practitioners who are "mainly undertaking highly skilled and specialised work", of which "research" or "development work" are quoted as "examples". Highly skilled and specialised work are defined as "work"...significantly beyond that which may be expected of even an experienced practitioner".

The fourth key problem was the absence of management to organize these extremely scarce resources. The main reason for this was the absence of the superintendent physiotherapist at the district general hospital who had left the post two years earlier. The health authority had refused to appoint a permanent successor because it felt that the new district physiotherapist should make this senior appointment. In the meantime the superintendent's deputy tried to organise the service - until she became pregnant and left.

The lack of leadership at the superintendent physiotherapist (first-line manager) level was compounded by the scarcity of senior physiotherapist posts. By that time in 1985 the practice of having a team of physiotherapists of specialist physiotherapists (senior 1s and senior 2s) attached to a medical specialty had become fairly common practice. For example, the surgical wards at a district general hospital site were likely to have a physiotherapy team specially trained in treating and preventing chest problems after surgery.

The lead physiotherapist's responsibility (graded senior 1 or superintendent 4) was to provide a high level of clinical skills (defined earlier as highly skilled and specialised) and to organize the physiotherapy specialist service to the medical specialism.

We have seen earlier that the local service employed very few senior 1 specialists. However, the actual scarcity of physiotherapy expertise was aggravated by all physiotherapists, including those employed as specialists, having to work in a different specialism, based on a nine-monthly rotation. This prevented the accumulation of clinical



experience for high level clinical work and also disrupted professional relationships with the multi-disciplinary nursing and medical teams on the wards.

The physiotherapists were aware that the scarcity of experienced staff lowered the quality of their work. They also believed that the low quality of their clinical work was the reason for their low standing with other professions.

Another lack of skill associated with low professional standing were lack of social skills, and in particular their poor ability to communicate with other professionals. In turn, poor communication was associated with low confidence, in particular when conflicts with other professionals occurred. Conflicts with other professionals were a fairly common occurrence so that the environment was generally considered to be "hostile".

Because the physiotherapists were never successful in tackling these conflicts they thought of themselves as "underdogs", "ignored", "undervalued" and "trodden upon" - "interlopers in the hospital".

Low regard for physiotherapy was also perceived to be the cause of actual "professional isolation". The physiotherapists were generally excluded from the various multi-disciplinary teams at the district general hospital. For example, the physiotherapist working with children at the district general hospital had not met with her specialist colleagues working with children in the community service.

Professional isolation was also a problem inside the physiotherapy service. Many of the staff had never met with physiotherapy colleagues working in other geographical locations or specialisms in other parts of the same health district.

Nevertheless, professional isolation was most sorely felt to be a problem by those working in the community, often as sole practitioners. For example, the physiotherapist who worked as a sole practitioner in a school for mentally handicapped children had not had any contact with her paediatric colleagues or her manager. But even where the physiotherapists worked in one location, such as the district general hospital, there was a reluctance to consult with colleagues about work.

The physiotherapists felt that lack of esteem, confidence and professional isolation had led to their reluctance to accept full professional responsibility for their work. At the time of my appointment most of the physiotherapists clung vigorously to the belief that "the

doctors know better about physiotherapy than physiotherapists because they have had a longer and better training than physiotherapists."

Coupled with this belief in the superior knowledge of doctors was the belief that patients could only be treated after referral from a doctor because the doctors took some legal responsibility for the physiotherapy treatments of patient referred by them.

In spite of the physiotherapists' awareness of skill deficiencies and its consequences, no local in-service training to raise skill levels had been organized.

Having assessed the physiotherapy service soon after my appointment, it seemed to me that the service was "thoroughly unprofessional". It was nevertheless not clear what "unprofessional" meant. The only explanation I could give to myself was that professionalism seemed to have something to do with quality of service backed by high levels of expertise, and with being able to act independently from the medical profession.

### **Local management initiatives to promote quality of service and professionalism in physiotherapy**

As the new manager I had to address two key questions. What is a physiotherapy service of good quality ? And which kind of changes will achieve a service of good quality ? These two inquiries into quality guided the first changes I made as the new manager. They were changes which centered on raising the levels of knowledge and skills in the service and on promoting autonomous decision-making in physiotherapy. Both changes seemed to be expressions of the new policies guiding physiotherapy towards a new professionalism.

First, the quality of knowledge and skills. Physiotherapy was a clinical service which required high levels of knowledge and expertise. Knowledge needed to be updated regularly through post-registration training. The question was, what kind of training ?

I was aware that these ideas and questions were influenced by the new policies which governed physiotherapy practice. Changes in the new pre-registration curriculum of study of 1984 stressed the importance of proper basic training for physiotherapists which included being trained in the ability to "analyse" physiotherapeutic problems.

Physiotherapists being able to analyze seemed the key to quality in physiotherapy. Moreover, they needed to be competent to diagnose patients' problems themselves, rather

than diagnoses being made by medical practitioners who referred the patient after diagnosis to the physiotherapist.

The new curriculum also stressed the need to keep abreast of developments in physiotherapy knowledge through regular post-registration education. Like many other district physiotherapists I felt that formal post-registration education needed to be complemented by local training. The implementation of a local training programme became therefore the first change I made as the new manager. The details of local training will be described later in this chapter.

My second criterion of a good quality in physiotherapy centered on physiotherapists being clinically and managerially independent from the medical profession. This idea had also been prompted by the policy changes of that time. Health circular HC77(33) made it possible for physiotherapists to treat patients without explicit medical referral.

However, based on my own experience as a physiotherapy clinician, I also believed that it was more appropriate for physiotherapists to make all clinical decisions relating to physiotherapy treatments. My reasons for this were that doctors had no formal training in physiotherapy. Any knowledge about physiotherapy was usually acquired whilst working in a hospital i.e. by experience only.

I was aware that clinical and managerial autonomy were closely linked because conflicts over clinical issues were ultimately referred to district physiotherapists. I was also aware from my contacts with other district physiotherapists that the frequent conflicts often remained unresolved.

One possible outcome was that the district physiotherapist felt that she needed to appease the medical profession by "giving in" to the doctors demands. The problem then was the frustration of her own staff.

On the other hand, the district physiotherapist might insist on the physiotherapists' right to treat without referral, which usually meant that the issue would be raised again and "bad feelings" between clinical physiotherapists and medical staff would prevail.

Good quality therefore meant trying to resolve these conflicts by making the physiotherapists competent and responsible for handling these conflicts in the clinical situation. I felt that the senior 1 clinicians were the most knowledgeable clinical staff who would be able to argue their case on sound clinical grounds. However, they needed to add

knowledge and understanding of how to organize the service and the ability to communicate well to their clinical expertise.

The details of these first management changes - local in-service training, involvement in decision-making and the re-structuring of the service - will be discussed next.

### **Management initiative: the physiotherapy education program**

The first major change was the design and implementation of an in-service education and training program for all physiotherapists. The program was drawn up one year in advance. It was compiled in consultation with all specialist teams by asking each team to propose topics of interest. My main reason for consultation with staff was a sense that some physiotherapists were not enthusiastic about education. I hoped that asking them to contribute would increase their interest and co-operation.

The program contained many clinical topics which had been proposed by the clinical staff: physiotherapy for children (paediatric physiotherapy), orthopaedic physiotherapy, multiple sclerosis, hand injuries and physiotherapy for backs etc. I added managerial, professional and legal topics, which the physiotherapists considered to be - initially - less interesting and relevant to their role as clinicians. (The first education program is appendix A).

Although the physiotherapists were generally enthusiastic about the new education system, one specialist team refused to attend any of the lectures on professional and managerial topics. They were also reluctant to come to education sessions about clinical work in other physiotherapy specialisms. My response was to negotiate a compromise: a representative of the team had to be sent to each lecture, and the contents of the lecture had to be communicated to the rest of the team.

One of my reasons for including management topics in the first-year education programme was to prepare physiotherapists for their new management role as specialist team leaders. I felt that this required a general understanding of management issues, including the understanding of new management roles in physiotherapy. My role as district physiotherapist was not understood at all and the staff found it impossible to distinguish my role from the superintendent (first-line manager) role. Hence, "The Role of the District Physiotherapist and the Superintendent" (appendix A) was included in the program.

Other managerial topics included were "The Managerial and Professional Role of Senior Physiotherapists"; "Development Planning - Developing the Physiotherapy Service in your

Area" and "Monitoring in Physiotherapy". The purpose of these was to prepare physiotherapists for their new roles as first-line managers of specialist teams.

The program was a regular event which was held three times per month and which all of the thirty-three physiotherapists working throughout the entire health district were asked to attend.

Many of these lectures were given by the physiotherapists themselves; some lectures were held by outside speakers, including doctors and nurses working in the same health district. All lectures on management topics were given by me, but some key members of the physiotherapy profession were asked to lecture to my staff. Examples of this were the Director for Professional Affairs of the Chartered Society of Physiotherapy and the Physiotherapy Research Fellow of King's College in London.

I also hoped that the district-wide education programme might solve another key problem: professional isolation by giving the staff the opportunity to meet in order to get to know each other and to exchange knowledge informally.

For me, the manager, the education programme was an opportunity to meet regularly with all of my staff, to communicate my vision of the future and to discuss with them the value of my ideas. It was particularly important to me to receive critical comment from the staff on any of my proposals.

### **Management initiative: re-structuring into specialist teams**

The second major change was the re-structuring of the physiotherapy service into specialist teams. Its purpose was to raise levels of knowledge and expertise by creating a structure which ensured that the clinical expertise of physiotherapists was organised and used to optimal effect.

All physiotherapists, except the basic grades (who are the "learner grades"), were to be employed in specialist functions. The most experienced practitioners (senior 1s or superintendent 4s) became the leaders of the specialist teams with first-line management functions. It was their responsibility to assess the levels of clinical expertise required in their specialist area, to share their knowledge with less experienced staff and to provide training for less highly skilled staff.

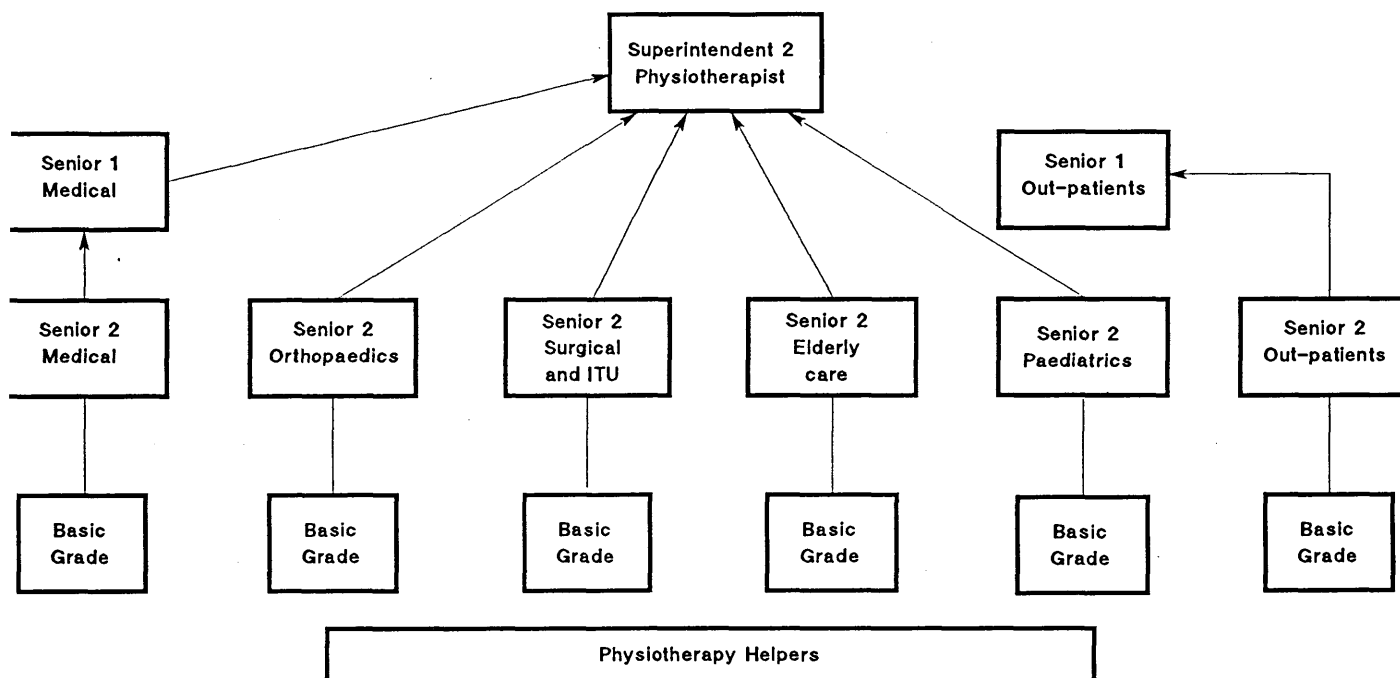
To acknowledge responsibility for managing teams which were particularly complex, some senior posts were graded at the higher level of superintendent 4 or superintendent 3 physiotherapist. An example of a more complex specialist service was the district-wide children's service, to which a superintendent 3 was appointed. The paediatric service delivered clinical services to physically and mentally handicapped children in five locations: a school for physically handicapped children, including a special nursery, a school for younger mentally handicapped children, a school for older mentally people, a centre for mentally handicapped adults and a children's ward at the district general hospital.

The diagrams (next page) are examples of re-structuring at the district general hospital. The first diagram shows the service before re-structuring; the other presents the re-structured service.

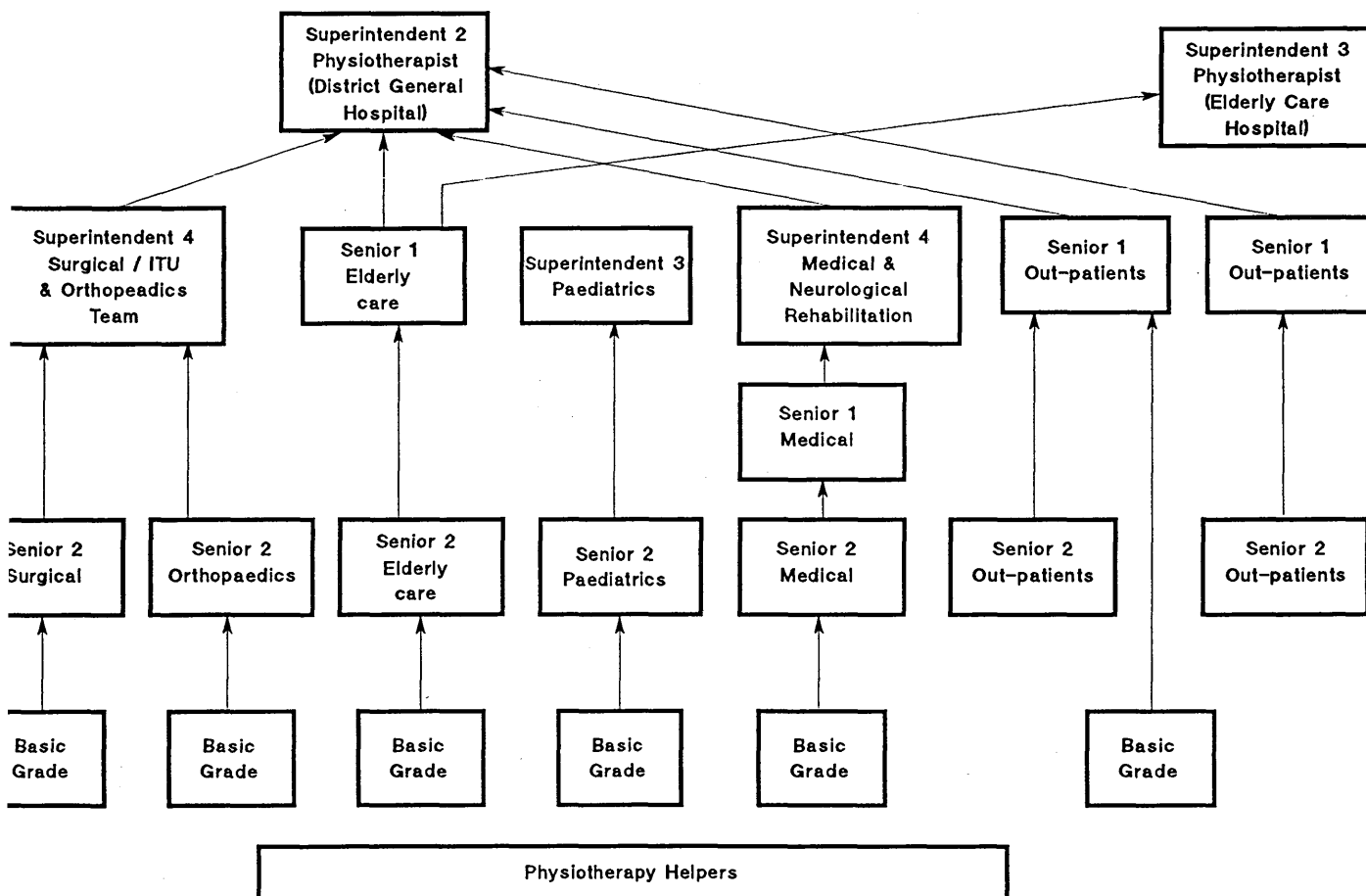
The uppermost diagram shows that in 1985 only two out of the five specialist sections at the district general hospital had been led by a senior 1 physiotherapist. Three were led by senior 2 physiotherapists, who according to Whitley Council grading are expected to have relatively low levels of specialist skills. Senior 2 posts are training posts for senior 1 positions, providing an entrance into specialism.

In contrast, the new specialist structure, also shown on the next page, contains seven senior 1 posts for highly skilled and experienced clinical practitioners. This level is backed up from below by seven lower graded senior 2 posts. At senior1/ superintendent level the structure combines clinical expertise with management responsibilities for organising the specialism.

# THE STRUCTURE OF THE PHYSIOTHERAPY SERVICE AT THE DISTRICT-GENERAL HOSPITAL BEFORE RE-STRUCTURING IN 1985



# THE STRUCTURE OF THE PHYSIOTHERAPY SERVICE AT THE DISTRICT-GENERAL HOSPITAL - AFTER RE-STRUCTURING IN 1986/87



## **Management initiative: "development planning"**

The third major change was a review of physiotherapy services. Each team leader was asked to assess the quality of clinical work of her team. But whereas the education program and re-structuring were seen as a preparation for producing greater quality of clinical care, development planning project was the project which would intended to radically alter the quality of physiotherapy services.

One reason for involving the senior 1 specialists in organizing the teams has already been given: the likely conflicts with medical profession over autonomous decision-making needed to be handled competently and successfully.

However, a second reason was the idea that the most experienced clinicians needed to contribute their clinical knowledge and expertise to the process of planning the environment in which clinical physiotherapy is carried out. Good planning needed to be based on up-to-date clinical knowledge and knowledge of working in the specialism.

The project was called "development planning" to convey my sense that the physiotherapy service was in urgent need of development. The idea of planning physiotherapy services was introduced during one of the education seminars, and a planning model was presented to the staff.

The model contained a statement of "overall purpose or objective" which expressed the specialism's "philosophy". Some specialist teams agreed that their statement of the service's philosophy should be: "to provide a caring and efficient service".

More concrete "goals" were then set within the context of the overall objective. Examples of such goals were, "to establish a more efficient system of documentation and record-keeping" or "to develop a training program teaching qualified nurses and auxiliaries how to lift patients".

The model included methods for evaluating and monitoring the service. For example, the physiotherapy team for the medical wards decided to assess the quality of physiotherapy services for stroke patients by measuring the fluctuations in admission rates of stroke patients. The human resources necessary to treat strokes was estimated on the basis of these measurements. (More detailed descriptions of development planning are given in chapter ten.)



The physiotherapists were very enthusiastic about making the development plans and, after piloting the model in the medical rehabilitation section, each specialism produced a development plan.

The following extract from the development plan for the district-wide physiotherapy service for children (paediatric services) (shown next page), is an example of an initial (highly abbreviated) development plan. The plan contains a statement of the service's "overall purpose", its specific "goals" and list of "actions".

The plan is an initial attempt to define standards in physiotherapy. The details had to be specified further as the specialist teams thought more about these plans and started to translate thought into actions.

### **District Physiotherapy Service - Development Plan For Paediatrics and Mental Handicap**

**PURPOSE:** To provide appropriate physiotherapy management of the highest standard for all children and all mentally handicapped people living in...Health Authority.

**GOALS:** To provide:

- 1) high standards of physiotherapy management for each child and adult.
- 2) adequate resources.
- 3) good communication.
- 4) useful records and reports.
- 5) to develop an adequate model of assessing the future needs for physiotherapy services of the population of the health district.

**ACTION for 3):** To provide good communication:

- a) to develop counselling skills;
- b) letter writing/report writing;
- c) attendance at and contribution to meetings/discussions;
- d) education of other physiotherapists and other professions.

### **Organizational structures**

Making the development plans also stimulated further thinking about how the physiotherapists' skills could be organized - "even better" - to produce work of high quality. Some thought had already been given to the structure of the physiotherapy service when all

staff had been allocated to specialist teams. Its primary purpose had been to organise the application of physiotherapy knowledge (expertise) in the clinical situation by giving the senior physiotherapists the responsibility for supervising the work of less experienced practitioners and for sharing their expertise.

But making the development plans - which the staff and I considered to be a new and difficult idea in physiotherapy - appeared to require some special kind of network of support, possibly extending beyond the boundaries of the existing specialist teams.

My reasons for wanting a support network for the physiotherapists were rooted in my own experience. Working closely with colleagues in teams had made my own projects easier to accomplish because expertise and experience could be shared with others. This resulted in problems being turned from burden into challenges. Working with others appeared to produce work of a higher quality.

These ideas were discussed with the physiotherapists when development planning had entered the difficult stage. This was when the initial plans needed to be refined and first attempts to put plans into action were being made. This phase required greater skills and patience than earlier stages of planning. It was also a time when the problems contained in the plans come to light and the initial enjoyment and excitement of doing something new turns into dissatisfaction.

My discussions with the physiotherapists revealed two major problems: the professional isolation of some staff and poor planning skills. The two problems were linked. The most frequently voiced complaint - "still feeling isolated" - came from the staff who still worked as sole practitioners and in locations at some distance from the district general hospital. These were also the physiotherapists who were unable to solve some of their planning problems. Examples of technical planning problems were: "difficulties with identifying longer-term goals"; "fixing a time scale for the implementation of the plans", and knowing what data to collect for monitoring the service" or simply "checking out the value of one's ideas..."

The physiotherapists' reason were, "not being able to talk the problem over with other physiotherapists who had the same problem".

From my own practice as a planner I was aware that these problems were experienced, but also solved, by many planners. They were solved by discussion and reference to the relevant management literature when teams are more established and mature.

To solve these problems the physiotherapists and I thought that it might be useful to strengthen the support function of the existing specialist teams by extending the existing specialist teams into wider "support networks". We decided that the basis for joining would be: "experiencing the same or similar problems", or "support from persons with whom one had good personal rapport." It was left to the physiotherapists to seek support from any existing group of their choice or to form new group.

Some months later a staff meeting was held to check on the usefulness of the support groups. It showed that the earlier difficulties of working in teams or networks, in order to support the planning process, continued as before. Indeed, the situation seemed to be more confused and confusing.

The "medical support group", whose membership consisted of the specialist staff for the medical wards plus staff from various locations treating medical conditions also, thought that "the group was too diverse to work and plan together". The group also felt that "very little support" was offered by the group, which had prompted its re-definition as a "project team" carrying out the planning of specific district-wide clinical services. Nevertheless, the few physiotherapists who had joined the medical support group from outlying locations of the health district found the group a source of support.

On the other hand, the "paediatric working party" thought that "the group was supportive" because it gave the physiotherapists "a chance to meet". However, the meetings were not considered to "affect the development plan".

The physiotherapists of the district general hospital thought that support groups were not necessary because they "could keep in touch with people anyway". They "met in the mornings and at lunchtime and special meetings were not necessary. They "were a waste of scarce clinical time".

Some physiotherapists had found it difficult to choose a group; others were confused about the choice of group because they "shared some, but not all, problems with the groups they had joined."

My discussions with the physiotherapists led us - eventually - to conclude that support groups were "more confusing than useful". The staff needed to settle into their specialist teams without being denied the choice to draw on a wider network of people for support.

## **Summary, discussion and insights - the next step**

At this stage, my reflections were predominantly those of a manager. They are described here because, this being practitioner research, these initial thoughts determined my decision to research particular aspects of my work rather than other management problems.

To tackle the problems of low levels of knowledge and skills in physiotherapy I had provided post-registration training by having a lecture program. Like many other managers, my thoughts had been to "provide knowledge through training" - a traditional management response. It seemed however that the main value of these lectures went far beyond listening to a lecture. The lectures gave an opportunity to the staff to share their knowledge, to communicate on all sorts of issues, simply to "be" with their colleagues - and to open up channels of communication which would provided access to expertise at a time when it was needed. This heightened my awareness of the importance of organizational structures and of teams.

I also became aware that devolving decision-making to the specialist teams via "development planning" increased knowledge and skills of the clinician physiotherapists. This was the knowledge to shape the environment to the clinical task, in order to produce the best quality of clinical care and to make the best use of resources. Being involved in planning also seemed to have forced the staff to reflect on what they were doing: what worked well, what did not work well.

There were two aspects to these reflections about organizing clinical work and the environment to clinical work. One was : what works clinically; the other was: what works managerially. The two began to be seen as two facets which were linked and interdependent, rather than as being separate issues.

The idea of the separation between those who "do the work", such as treating patients, and those who manage is firmly ingrained in organizations and their structures - and has become more ingrained with changes in the management of the NHS. "Functional management" has been replaced by "general management".

However, my own experience was that there were considerable advantages in giving those who did the work the responsibility for organizing the service also. The unusual aspect of local management arrangements was that those who directly provided the service, were involved in making the strategic plans for the area in which they worked.

Although senior clinical staff are normally involved in operational decisions of their "clinical patch", they normally have relatively little, or no say arrangements for future services (strategic planning). This is usually seen as the role of senior managers who may - or may not - consult with the most senior specialist without the whole team being involved. It is very unusual for the entire clinical team to be involved in this process of planning.

Giving the clinical staff greater scope for decision-making also made me reflect on the issues of professionalism in physiotherapy. Professionalism seemed to imply greater knowledge and greater scope for physiotherapists to make decisions, rather than the medical profession making decisions for physiotherapists. Hence, the two policy directives ((HC77(33) and HC89(19)), of which the former conferred greater clinical responsibilities upon physiotherapists; and the latter instituted self-management in physiotherapy via the district physiotherapist posts.

My initial management changes also heightened my awareness of my own lack of knowledge of how physiotherapists make decisions. I did not know, for example, how basic grades who are professionally responsible for all of their clinical actions, and the senior physiotherapists who are "in some sense" responsible for all decision made in "their" specialist team, come to some joint agreement about what kind of treatment a patient is to receive. How do physiotherapists make decisions about managing and organising work ? Do learner physiotherapists have a say ? Do senior physiotherapists think that basic grades should have a say ?

These and other questions about decision-making in physiotherapy were the next stage of my investigation. The pilot study about decision-making in the local physiotherapy service, its results and contribution to the research design will be reported in chapter two.

## **CHAPTER TWO**

### **PILOT STUDY OF DECISION-MAKING IN PHYSIOTHERAPY**

Developing an organizing framework - framing observation of decision-making in physiotherapy.

Results of pilot interviews:

clinical decision-making and managerial decision-making.

Team leaders and development plans: interviews and documentary evidence.

Summary and discussion of results - the next step.

Decision-making had - like knowledge and skills - been identified as a potential key variable. Based on the profession's policy thrust towards professionalism, "more decision-making by physiotherapists" had been incorporated into the local developments, such as "development planning", the associated "support group project" and the re-structuring of the service into specialist teams.

My assessment of these initial service developments had made me realise that I needed more systematic information about decision-making and the kind of expertise associated with professionalism in physiotherapy. This was therefore the point at which my management project became a research project, at which the project progressed from the intuitive and relatively vague observations and interpretations of a reflective manager to observations and interpretations informed by concepts and theories as a researcher. The manager became, in part, a researcher.

Preliminary information-gathering was carried out in two phases: by interviews about decision-making in the local physiotherapy service (described in this chapter); and by analyzing the knowledge system used in physiotherapy, as described in the literature about physiotherapy practice (chapter six).

This chapter is structured in the following way. After a brief discussion of the methodological issue of "organizing frameworks" and "theoretical frameworks", the organizing framework for the decision-making pilot is outlined. This is followed by the presentation of the interview data in the "Results" section.

The chapter ends with a summary of results and a discussion of their meaning. This discussion is "linked back" to the policy issues and my original management problem, and

"linked forwards" to the second stage of information-gathering about professional knowledge systems and professional decision-making.

All research methods used at this stage (interviewing and observation) - like all other methods used throughout the study - will be discussed in the methodology chapter (chapter four). This avoids duplication in the discussion of research methods and produces a clearer and more continuous outline of how the insights from the pilot work and literature reviews helped to develop the theoretical framework of the study and its research design.

Nevertheless, some methodological issues needed to be discussed in the text, as the first few paragraphs in the next section about "The organizing framework for the data collection" will show.

### **Developing an organising framework - framing observation of decision-making in physiotherapy**

In the "seven steps" of conducting management research, described by Sekaran (1984), preliminary data-gathering is typically the second step. It involves seeking more information about what had been observed earlier as a management problem and seeking information in a more systematic way (Sekaran 1984). The "theoretical framework" for the main study is developed simultaneously during this stage, based on building the "organising framework" for the researcher's pilot work and its results.

The definition of organising frameworks used in this study is Miles' idea of "orienting ideas" (Miles 1984) or Bulmer's notion of "sensitising concepts", which are used as "observational tools"...to "suggest the direction along which to look" (Bulmer 1977). One function of organizing frameworks is, therefore, to focus observation.

But organizing frameworks - of which there might be a number - have a second function. This is to aid the development of the "theoretical framework" which "overarches" the entire research project. To use Sekaran's words, theoretical frameworks are the "foundation on which the entire research project is based" (Sekaran 1984).

To frame the data collection about decision-making a relatively complex organising framework was devised, which resulted in a "topic guide". The guide was used as a loose exploratory structure for the interviews with physiotherapists.

The complexity of the framework sprang from my perception of the complexity of decision-making in physiotherapy. A very wide spectrum of decisions appeared to be made daily by physiotherapists, ranging from complex clinical decisions based on the skill to analyse complex problems, to organising workloads and planning health care. Only one study by Kinston et al(1981) had investigated decision-making in the profession of physiotherapy. However, this study was only concerned with attributing types of decisions to grades of physiotherapists. There had been no investigation of the processes leading to actual decision-making.

To explore decision-making in physiotherapy I decided to do pilot interviews with a small number of physiotherapists working in the local service. (All research methods are described in the methodology chapter, but conceptual development of the study is explored here.) The organising framework was predominantly based on Hage's exploration of "axiomatic theory" (Hage 1965) and on testing the theory "social welfare organisations" (Hage and Aiken 1967; 1969) and in social work (Kakabadse 1982). However, the concepts of axiomatic theory, including its indicators, were modified by Lickert's work on processes ("operating characteristics") which are associated with decisions-making (Lickert 1967). Ideas about decision-making in physiotherapy based on work stratum theory (Kinston 1981) were also used to structure the interviews about decision-making.

But although organizing the observation of decision-making in physiotherapy was the key task at this stage, the decision-making variable needed to be understood in the context of the other variables which form a system (or organization). Understanding an aspect of a system (such as decision-making) as a functional part of an entire system (the organization) needed to be achieved at this stage to make sensitive and intelligent modifications to the indicators of decision-making used in axiomatic theory. This is why axiomatic theory is described here at some length.

It was also likely that such understanding would yield a better understanding and better interpretation of the results of interviewing about decision-making. My understanding of organizations from the perspective of axiomatic theory is therefore reported first and before the indicators of decision-making are discussed.

Axiomatic theory is a theory of organizations which fits into the systems approach (\*) of analyzing organizations. Hage (1965), the author of the axiomatic theory which is used in this study, conceptualized decision-making (the "centralisation" variable) as one variable of

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(\*) The key ideas of the systems approach and how Hage's axiomatic theory fits into the approach are outlined in appendix B.



a system of eight interlinked variables. Four of the eight variables are organisational "means " or structural variables, and four organisational "ends" or functional variables.

The four structural variables are: "organisational complexity" - the skills dimension - ; "centralisation " - the power dimension (which is decision-making); "formalisation " - the rules dimension; and "stratification" - the reward system of an organization. The four organizational ends - or outcomes - were: the volume of production i.e. the output of the organization produced in terms of quantity or quality; efficiency or the ratio of input to output; job satisfaction (or morale), and flexibility (or change).

In axiomatic theory organizational means are related to organizational ends and these relationships were expressed in "seven major propositions" and "twenty-one corollaries" (Hage 1965). For example, the level of knowledge and expertise of employees (degree of complexity) is linked in the theory to the degree to which employees are allowed to participate in decision-making (degree of centralisation). Hence the proposition "the higher complexity, the lower centralization" i.e. the higher the skills, the more participation in decision-making.

Hage also defined two ideal or "extreme types of organisations" Hage 1965): "organic/dynamic" and mechanistic/static", which are shown below.

<b>Organic model</b> <b>(Emphasis on adaptiveness)</b>	<b>Mechanistic model:</b> <b>(Emphasis on production)</b>
High complexity	Low complexity
Low centralisation	High centralisation
Low formalisation	High formalisation
Low stratification	High stratification
High adaptiveness	Low adaptiveness
Low production	High production
Low efficiency	High efficiency
High job satisfaction	Low job satisfaction

Contained in the idea of extreme types is the idea of a continuum of organizing these variables which lies between these two extreme types. All, or most, decisions can be shared throughout the organisation (organic type) or be confined to small elites (mechanistic type). However, between these two extreme forms of decision-making there will be many other

possibilities of making decisions along a continuum of "more" or "less" participation in decision-making.

A final key idea of the axiomatic system is "organisational equilibrium". In the two extreme organizational types all variables are aligned in a state of equilibrium. For example in organic type of systems, when knowledge is high (high complexity), decision-making is shared (low centralisation) and the emphasis on using rules and status consciousness are low (low formalisation; low stratification).

However, as soon as one variable changes in response to the environment in which the organisation functions, disequilibrium occurs. The relationship between that particular variable and all other variables of the same system is no longer in a state of equilibrium. For example, organizations may need to employ more highly trained staff in response to an environment which demands a more sophisticated product. The change to higher complexity would require an organizational adjustment towards greater degrees of employees participation also.

Equilibrium is re-established when the other variables have adjusted themselves to the initial change. Disequilibrium is seen as a source of "functional strains" (Hage 1965). To return to the earlier example, if great participation in decision-making is denied to highly trained dissatisfaction is likely to prevail in the organization.

From a management point of view, axiomatic theory was certainly attractive because its concepts suggested ways of adjusting levels of knowledge/skills, and decision-making in a systematic way and being able to do this without "functional strains". From the point of view of research (which remained linked to practical problem-solving issues), axiomatic theory proposed a way of measuring systematically the extent to which the structure of an organisation was participative ("organic").

However, the indicators which Hage and Aiken had used to test participating in decision-making did not seem to reflect what I considered to be a participant kind of decision-making in physiotherapy. Some aspects of the indicators needed to be adjusted to reflect physiotherapy practice.

Hage and Aiken's "index of participation in decision-making" tests four activities in which staff might participate: "hiring new staff" and "promotion"; the "adoption of new policies" and "new programs" (Hage and Aiken 1967).

Of these four the first two ("hiring new staff" and "promotion") were not suitable areas of participation for the most junior staff (the basic grades). These new entrants to the profession lack the clinical experience to judge whether senior staff (senior 1s and senior 2s) are sufficiently experienced and knowledgeable to be appointed to senior positions.

Nevertheless, decision-making about "new services" and "new policies" were appropriate indicators for all staff, and were therefore included in the topic guide (shown later in this chapter).

Analyzing Hage and Aiken's indicators and finding some areas of decision-making unsuitable for physiotherapy raised the issue of "who does what". This was the issue of the structure decision-making and how this could be adequately measured in physiotherapy.

Judging from my own experience as a physiotherapy practitioner an important indicator of centralised/de-centralised decision-making was thought to be a newly qualified practitioner's ability and opportunity to take clinical decisions without undue "interference" from senior colleagues. In hierarchically structured physiotherapy services superintendent physiotherapists were known to "interfere" in the clinical decisions of physiotherapists. However, none of these problems had been considered in the Hage and Aiken study (1967).

A study of decision-making in Social Services by Kakabadse (1982) provided a more comprehensive inventory of decision-making and also included "case work", the equivalent of clinical work. Kakabadse's ideas were adapted to physiotherapy work. Like social workers, physiotherapists make decisions about clients, which is equivalent to clinical decision-making. They are involved in identifying new areas of need, have responsibility for research and evaluation, strategic planning, staffing, training, appraisal and staff development.

The conceptual framework used by Kakabadse (1982) was divided into decision-making about "non-operational" and "operational" decisions. Non-operational decision-making encompassed: research and evaluation, strategic planning, staffing, training, public relations, managerial tasks such as staff induction, distribution of work, supervising work, appraisal of personnel, staff development, logistic considerations such as providing adequate premises and equipment, and support services.

Operational decisions were divided into "micro-level" services to individuals i.e. casework with individuals, and "macro-level" services aimed at the local community, which consisted of identifying new areas of need and of developing services.

Although this inventory of organisational decision-making represented a comprehensive range of decisions, and could be adapted to decision-making in physiotherapy, it did not classify the decisions into a hierarchy of decisions i.e. "who decides what?" This was needed if ideas of "organic style" were to be explored.

But such a classification had been developed by Kinston (1981). "Work stratum theory" divides work into "technician work - level 1", where "the end product can be specified beforehand". This is followed by "level 2", which is "basic professional work". Here, "precise objectives have to be determined according to the needs of each particular case." Above this at "levels 3 and 4" is managerial work, with levels 3 being first-line, operational management and "level 4" being senior management work. At level 3 the "requirement is to make and develop systematic provision of services shaped to a changing flow of needs or cases which present themselves." Finally, level 4 is "comprehensive field provision according to the total and continuing needs throughout some given territory and catchment area."

Work stratum analysis in the physiotherapy profession had shown that superintendent physiotherapists work at level 3, whereas district physiotherapists work at level 4. Basic professional work is carried out at level 2, with level 1 being technician work.

Because work stratum theory had been tested widely in the physiotherapy profession it constituted a baseline of physiotherapy practice against which the local physiotherapy service could be tested. Thus, whereas Kakabadse's study of decision-making had provided an inventory of types of decisions which fitted the physiotherapy service, Kinston's study ordered these decisions hierarchically. This was important because one of the areas of interest of this research study focussed on the degree of centralisation and de-centralisation of decision-making.

None of these frameworks were however adequate for the investigation of processes associated with actual decision-making. This was of interest because these processes provide further evidence for or against organic/mechanistic patterns of decision-making. However, Lickert's study (1967) of "organisational and performance characteristics of different management systems" was useful. Lickert had analysed decision-making and the processes associated with, or leading up to, decision-making according to type of

organisational system. The processes associated with decision-making were: communication, the provision of information and control processes leading to actual decision-making.

Lickert had also been able to identify four types of organisations, ranging from "participative" to "consultative", to "benevolent authoritative", and to "exploitative authoritative" types, all of which engaged in decision-making in a different way. For example, in an exploitative/authoritative organisation decisions are made "man-to-man, discouraging teamwork and the passage of information to the lower strata of the organisation" (Lickert 1967, p.229). In contrast, participative systems make decisions which are "largely based on groups, encouraging teamwork, the passage of information and communication" (Lickert, p.229). This appeared to correspond closely to Hage and Aiken's (1967) organic/mechanistic classification.

With this group of concepts in mind the following two checklists were compiled to map out areas of questioning. These were then used as a guide for the pilot interviews with six physiotherapists working in the local service.

## CHECKLIST 1 : WHO DECIDES WHAT ?

### A. OPERATIONAL DECISIONS:

#### 1. CLINICAL DECISIONS aimed at INDIVIDUALS ie. "MICRO-LEVEL DECISIONS"

- a. Who decides the type of treatment a patient receives ?
- b. Under what circumstances do the staff at the bottom of the hierarchy i.e. basic grade refer clinical decisions to senior physiotherapists in charge of a speciality area?
- c. Who manages communication with relatives ?
- d. Who communicates with physiotherapy colleagues about problems with a patient ?
- e. Who communicates with members of other professions about a patient ?

#### 2) MANAGEMENT DECISIONS i.e. "MACRO-LEVEL DECISIONS"

- a) Who identifies gaps in service provision ?
- b) Who initiates the development of new services based on the assessment of new needs ?
- c) What happens if new needs are identified ?
- d) How is the service co-ordinate between sections and by whom?
- e) Who communicates gaps in services and the need to develop new services to the superintendent and the district physiotherapist?

### B) NON-OPERATIONAL DECISION-MAKING:

- a) Who participates in decisions about evaluation procedures ?
- b) Who participates in the comprehensive planning process in the physiotherapy service ?
- c) Who participates in the organisation of training activities in the service ?

- d) Who participates in decisions about the allocation of staff to a speciality area ?
- e) Who participates in decisions about adequate premises and equipment and other support services ?

## CHECKLIST 2 : HOW ARE DECISIONS MADE ?

- 1) What are the mechanisms and structure for decision-making at individual and group level ?
- 2) What is the predominant form of interaction - lateral consultation or vertical command at different levels of the service ?
- 3) What are the areas of tension or conflict and what are the mechanisms for resolving any conflicts ?
- 4) Are the information flows adequate for decision-making processes in the service ?
- 5) Who makes the final decision ?
- 6) Who determines the issues to be discussed ?
- 7) Are there any mechanisms which thwart decision-making ?

## **Results of pilot interviews**

The findings are divided into two sections: clinical decision-making and managerial decision-making, followed by a summary and discussion of the "next step" to develop the research project.

The data for the clinical decisions are interview data only because it was impossible to extract clinical documentary evidence from patients' records. However, documentary evidence was used to supplement the evidence from interviews about managerial decision-making.

### **Clinical decision-making**

In spite of my own experience of physiotherapy as a practitioner and manager I was uncertain how basic grade physiotherapists made clinical decisions in the service I managed. I knew, however, that basic grades sometimes complained about a "lack of professional freedom" because "senior physiotherapists told them how to treat patients". Another complaint in the same vein was "not having your own ward". This meant that senior physiotherapists allocated patients to basic grades on a daily basis.

The two local basic grades who were interviewed about their own practice as well as the perceived general pattern of the service, reported that the local basic grades made all clinical decisions by themselves.

"Here we (the basic grades) are left to treat the patients in the way we think is right."

Both, basic grade and senior staff felt that this was appropriate, given the basic grades' training which encouraged independent decision-making during clinical secondments as students. The following statement, made by a basic grade, was typical.

"When you are a basic grade you are making your own decisions - and you should. You will be expected to do that - to have the knowledge to do that. You ought to be able to do it. You do it as a physio student."

The senior physiotherapy staff shared the basic grades' expectation.



"A basic grade can be expected to operate safely and efficiently. They get quite a lot of clinical training as students and are encouraged to work by themselves."

Nevertheless, the senior staff acknowledged that "junior grades" require "guidance" from senior staff in the application of skills in the clinical situation. By using the term junior grades" in the plural, the quote below implied that this was equally true of senior 2 physiotherapists, who are also a "learner" grade - for senior 1 positions. But, unlike the basic grades who are very inexperienced in the application of basic knowledge and skills. senior 2s need help at a more sophisticated level - at the specialist level.

"...but the junior grades need to consolidate their skills, get experience in applying skills under the guidance of a senior and to make up her mind about specialisation."

The senior staff's responsibility to help less experienced staff to improve the quality of their clinical decisions was linked to the idea of accountability for the clinical standards in the specialism, was explained earlier.

"The seniors are responsible for making sure that the standards of care in the section provided by themselves and by those working with them are of the required standard. So they need to keep an eye on what the juniors do."

The evidence for the devolved patterns of clinical decision-making was reinforced by analyzing the actual processes leading up to a decision actually being taken, One such process was: consultations between senior and junior physiotherapists. The evidence about consultation pointed to a pattern which has been described by Lickert as "participative/consultative".

Apart from showing that junior and senior staff did consult the excerpt below also shows the circumstances under which the basic grades felt it appropriate to consult with senior staff.

"I only ask my senior when I am not sure about the treatment...when I have doubts...I think a lot of it is during coffee breaks and lunch breaks and we chat. There is a "to-ing" and "fro-ing" of ideas. Maybe I am not sure where I am to progress to. And we chat about that and she'll put forward ideas. On the "isolation ward" she puts forward more ideas than I do because she has had more experience...So I ask the senior if it's relevant to my treatments. I go and ask, for example, if I'm not sure. If it's something else then I ask other people. "

The quotation highlights two other facets of participative systems. The process of consultation tended to be informal: coffee and lunch breaks were used to "chat" about work. Secondly, consultation was not restricted to the basic grades' immediate superiors. Anyone with the appropriate knowledge and expertise could be approached for help.

The local pattern of decision-making was similar to the behavior described by Lickert. Participative/consultative systems push decisions to the point where information is most adequate. And this is achieved through consultation with those who have the appropriate "technical and professional knowledge". These actions are underpinned by knowledge being highly valued.

The basic grades were asked specifically about the decision to discharge a patient from physiotherapy treatment. This can be a point of tension between junior and senior staff. One of the basic grades described the local pattern of decision-making as follows.

"If a patient is to be discharged we would speak to the senior. If we were completely happy about the decision, we go right ahead and do it. If we really knew we were right we wouldn't have any qualms about doing it and we would just report back afterwards."

The other basic grade interviewee supported this view with an example.

"...a man was admitted to the ward. He was unconscious and sounded very chesty and I didn't know whether it was appropriate to suction him at that time because he didn't look in immediate distress. It was a known thing that he was terminal and I didn't know whether to put him through a distressing thing like suction. So I phoned the senior and asked her and we looked at him together and we discussed it and decided that it would be a good thing to suction him... I was sort of ninety percent...but I wanted to make sure that this was the correct thing to do. I hadn't done a lot of suction of my own...I felt I had a good enough rapport with the senior to say, "I am confused here".

The excerpt also highlighted another characteristic found in participative/consultative systems: "upward communication", which is communication initiated by those working at the lower levels of the organization (Lickert 1967).

Nevertheless, the statement, "I felt I had a good enough rapport with the senior to say, "I am confused here", made me curious. Did consultation occur only when good rapport with the senior existed? Did the basic grades refrain from consulting with seniors when rapport was bad? What were the senior staff's reactions to criticisms from junior staff?

My suspicions were confirmed by the report of the basic-grade who worked in the surgical team. This is quoted at some length because it contains other useful ideas.

"I was working in another area - surgical and vascular - and there is a lot of thought that amputees should not have their stump bandaged and they should use a stump stocking or nothing at all. I brought my thoughts to the senior and put it to her that perhaps bandaging was not in the best interest of the patient and put to her the various cases that had been written up and the vast improvement when bandaging had been discontinued. The problem was that the senior was very good at stump bandaging but the nurses were not and when the "physio" was not bandaging, it did a lot of harm... There I identified a problem and the senior did not feel that she wanted to discontinue bandaging and the problem was left. There was no further reference to it and later the problem was solved in an indirect way because the consultant was approached by another consultant from S. who suggested that bandaging should be discontinued...So there was actually quite a problem but there had been no discussion. The decision was totally made by the senior."

In this scenario the basic grade attempted to negotiate a change in the clinical practice of the specialism, but the senior physiotherapist refused to enter into any negotiations.

Although this report indicated mechanistic behaviour in an organisation which up to now had appeared to be highly organic, the basic grade qualified her report by saying that the incident was not the typical of the general pattern of local decision-making.

"I think it's very different here to where I have worked before - both in S. and in H...Here the situation is that we have meetings in the morning together. The education sessions are together. Things are discussed together as a group because we are not segregated in any way - with discussions there is no distinction between grades. Occasionally there is someone who feels she is a senior and to emphasise that she almost has to demote the basic grade; to be a lesser member of staff; to having patients chosen for her; to have decisions taken away from her so that the senior can do it because she is a senior, but that only happens occasionally and it's an exception rather than the rule here. But it's strange to other hospitals. Other basic grades say it's lovely here. There is that freedom of information here and decisions are shared. You can talk to the seniors on an equal basis rather than as a basic grade."

Although the basic grade physiotherapist saw the behaviour to which she had been subjected as an exception in this service, she had experienced this kind of interaction between physiotherapists of different rank in two other services.

The excerpt also conveys an excellent picture of what a mechanistic type of organisation "looks like" in physiotherapy. Its features, described below, correspond closely to Lickert's authoritative type of systems: hierarchical structures enforced by rigid segregation of ranks and "rank pulling", resulting in conflict, fear, distrust and lack of confidence. New knowledge tends to be rejected, in particular when those working at the lower levels of the organisation possess this knowledge (Lickert 1967).

"In S. and H. (the physiotherapist's previous employers) the basic grades and the seniors were very segregated. There was very much more hierarchy. The basic grades' opinions were not wanted or heard or asked for. They were asked separately for their opinion instead of as a group of physiotherapist working in the service. There was a lot of conflict because the new basic grades came into the service with a lot of ideas and the seniors felt very threatened by that. They kept themselves as a clique and they felt that the information, the knowledge they had, was what made them a senior grade. They didn't go on courses, so they didn't have access to new knowledge and so they wouldn't show what knowledge they had to the basic grades. They didn't want the basic grades to share any information with them on anything because that would undermine their authority. There was a lot of conflict. The basic grades felt really undermined; that they didn't matter; that they were "dog's-bodies"; that they were not valid members of the district. Their opinions were not valued and their new techniques from going on courses were tantamount to trouble making."

The two basic grades' reports also raised my awareness of the psychological effects of organic and mechanistic systems: "conflicts" amongst physiotherapists of different rank; feeling "threatened", "undermined" and undervalued, described by Lickert (1967) also. In contrast, satisfaction with the local service was expressed by the use of the phrase, "it's lovely here".

### **Managerial decision-making**

Interviewing about managerial decision-making started with a clear sense that local decision-making was more devolved in comparison with other physiotherapy services. My staff and I knew from experience that elsewhere "management decisions" were made by superintendents and district physiotherapists only. They sometimes consulted with those doing the clinical work - and often did not.

This intuitive assessment had been confirmed by research into decision-making in physiotherapy (Kinston 1981) which had reported that all managerial decisions were the responsibility of superintendents and district physiotherapists.

Operational management and planning, called "systematic service provision" in Kinston's work (1981), is undertaken by superintendent physiotherapists and is therefore located at "work stratum three and four" - the first-line management level. The fourth and highest work stratum is strategic planning and policy-making - "comprehensive service provision" in Kinston's terminology. This work is carried out by district physiotherapists.

Kinston's idea of tasks which need to be carried out at different levels of the organization's hierarchy is a traditional but widely-held view. It also reflects the policy developments of that time. Superintendents had always been the operational managers in physiotherapy. But planning and policy-making in physiotherapy, had been the responsibility of doctors, had become the task of district physiotherapists with Health Circular HC79(19).

Locally, these ideas had been partly overturned by devolving aspects of strategic planning to the specialist teams, using the development planning project. Managerial decision-making - or at least some aspects of it - had slipped from the top to the middle of the organisation. It had been delegated to the clinicians of the service, who, according to Kinston's findings, normally work at "level two" of the four work strata. They do "basic professional work".

The local management changes had generated a strong sense of the service being "unusual" and "more professional". This view had been reinforced two leading members of the physiotherapy profession who had visited the local physiotherapy service. One was the "Research Officer for Physiotherapy" at King's College, London; the other was the "Professional Advisor for Physiotherapy" at the Department of Health and Social Security (DHSS). Both officers had an overview of professional practice by virtue of their position.

The main purpose of this part of the interviews was therefore to find out the extent to which planning had been devolved further within the specialist teams through consultation with senior 2s and basic grades. This would tell me: how decisions were made; to what extent management decisions followed an organic pattern.

## **Team leaders and development plans: interviews and documentary evidence**

All interviewees agreed that the team leaders made the development plans with the full participation of their teams. Every member of the team had been able to contribute to planning because of widespread consultation at all levels. In fact, the basic grades had "initiated improvements" because the senior staff had consulted with them. The quote (below) is an excerpt from an interview with one of the two basic grades interviewed.

"I made a suggestion that the future senior 2 will be looking at the Special Baby Care Unit, apart from having an emphasis on physical disabilities, and I investigated it. We discussed it and I said: "How about having a project on Special Care so that there is a source of knowledge about the Special Care Unit i.e. physiotherapy-related knowledge...That's what I am doing now...that was all my idea. N. left it very much to me whether I did it... where I felt the greatest need was..It seems to be quite common for the basic grades to do these projects...projects usually go into the development plans. They are the groundwork for it." The excerpt also provides evidence about the professional relationship between the superintendent and the basic grade. It appears to be based on trust and respect between staff of different rank. And the sense of freedom associated with trust and respect appears to have made it possible for the basic grade to take the initiative in improving the service.

It is also clear from the last quote that the basic grade considered this participative, consultative way of planning to be the predominant pattern of the service.

"It seems to be quite common for the basic grades to do these projects here...projects usually go into the development plans. They are the groundwork for it."

The basic grade's view was mirrored by statements from the superintendents.

"The basic grades and senior 2s - the juniors - really have a lot of say here. They are not excluded from anything. It's all discussed in the teams. And some of them have very good ideas. But sometimes it shows that they lack experience."

The pattern of the junior physiotherapists' involvement in decision-making was corroborated by documentary evidence from the local physiotherapy service. The files from five major specialist teams were examined to ascertain the contribution of basic grade staff to planning.

My examination of the files showed that the basic grades contributed ideas to all team discussions. Their most significant contribution had been a project to change the record-keeping system to the new "problem-orientated medical record system" (POMR) project which was led by the basic grades. My reason for appointing the most junior staff to be leaders was their knowledge of POMR. None of the senior staff had any experience of the new system, but most of the newly qualified physiotherapists had known the system well.

The idea of clinical staff - even the most junior staff - becoming leaders in some areas, challenged the role of those officially employed as leaders: my own role and the superintendents' role. If aspects of planning and policy-making were delegated to senior clinicians - or even to basic grades - what were the responsibilities of the superintendent and district physiotherapist?

The issue was discussed spontaneously during the interviews by the two superintendent physiotherapists who redefined their role in planning as "co-ordinators" by saying,

"Come to think of it, I am just a co-ordinator..."

This view was believed to be shared by the other superintendents who sensed that their co-ordinating role had its origin in the network of upwards and downwards consultation between physiotherapists of all grades. This co-ordinating role is described here in the context of how changes were initiated in the service.

"...if there is a change in direction, in types of patients, then the senior will approach the superintendent physiotherapist; if there is something I as the superintendent want to change I approach them. So, I initiate and the seniors initiate. Longer-term changes in direction have their origin higher up or someone is throwing an idea at a group meeting and the idea gets expanded...and of course we identified future needs in the development plans...You usually tell me about anything from the UMT (unit management team) or DMT (district management team) and I tell the staff, or you tell them. "

The quote describes a number of aspects of upwards and downwards consultation to which the superintendent appears to have been the central person. Hence, her new role as co-ordinator in which the specialist physiotherapy teams suggested changes in the service to the superintendent on the basis of having gathered information to support their case.

However, the superintendent physiotherapist also initiated change, but consulted with the seniors physiotherapists in charge of the specialist teams. Some changes were also

prompted by initiatives "higher up": by the district physiotherapist, or local and regional health authority initiatives which filtered downwards via the district physiotherapist.

"...or someone is throwing an idea at a group meeting and the idea gets expanded."

The quote also refers to "group meetings" which channel ideas into planning and managing the service. These group meetings are likely to have been the education sessions for the specialist teams, project meetings, special meetings and the regular district-wide education sessions.

The emerging pattern of decision-making was therefore one in which planning had been devolved to the team leaders, who consulted with the staff working below team leader level. The superintendents consulted with the team leaders, and vice versa. Consultation was initiated from below and from above at all levels of the organization. Consultation was not confined to the vertical channels of the organisation's hierarchy but consisted of a network of groups which individuals used for consultation with colleagues throughout the service.

This pattern of organising decision-making corresponded closely to Lickert's description of consultative/participative systems, in which an "integrated network of groups and individuals" channel information. Lickert found that seeking and giving information was associated an employee's sense of "responsibility and initiative" for communicating information. A second associated factor was the recognition that good decision-making requires "technical and professional knowledge" for decision-making (Lickert 1967).

The topic of consultation was linked to two other aspects of decision-making by the two superintendents only, who appeared to have thought more deeply than their more junior colleagues about management issues. They were therefore able to discuss two relatively sophisticated aspects of decision-making. One was the ability to "make a good case" during the process of consultation; the other was about the "final say" in decision-making. Both issues are discussed in the excerpt below.

"L. had a problem with the amputee group - with the transport. She came to me...We thought of possible solutions - we would go and see the transport controller...Basically I listen to what L. has to say and if she has a good case I take the final decision. In doing that I am accepting her judgment. I just put my name to it...There is conflict - no real disagreements. I trust her judgments. If I really think we should not do it, then they accept the reason why I am cautious about it. Maybe they are just giving in to me. I don't think I



am pulling rank. L. has a more powerful sense of rank than J. She does not have this. L. will go away and grumble, but J. will tell me exactly what she thinks. I end up saying why we can't do it...The way we make decisions...if the case is well constructed and a logical idea, then I can't see why their judgment will be questioned...If there is something I can fix, I will do all in my power to help. If I can't deal with it or it is not a priority then I'll say so straight away, so that the staff don't have the impression that something is being dealt with when it isn't. I don't have the impression that J. will be scared to ask whether something has been done. She reminds me."

First, "making a good case". The quote shows that the superintendent expected decisions to be made on the basis of the senior physiotherapist having made "a good case".

"...The way we make decisions...if the case is well constructed and a logical idea... In doing that I accept her judgment."

The "good case" is defined in more detail as - the "well-constructed" and "logical case", which is the basis on which proposals are accepted or rejected.

The excerpt also showed that the standard of rationality expected of the senior staff applied equally to the managers. Managers also had to justify their case for accepting or rejecting proposals using rational criteria - giving "reasons why".

"If I really think we should not do it, then I give reasons, and they accept the reason why I am cautious about it."

This type of rational decision-making was similar to the kind of decision-making described by Lickert as typical of consultative/participative systems. "Accurate and adequate information" - the basis of the good case - is used in to guarantee high quality decision-making (Lickert 1967).

Nevertheless, one of the superintendents appeared to have some doubts whether this rational way of consulting with each other contained an element of "pulling rank", as the quote below shows. However, as this was also linked to one of the senior physiotherapist's own sense of rank, the meaning of the statement is ambiguous.

In contrast, the other senior physiotherapists mentioned here - more outspoken and less affected by a sense of rank - was expected to contest the superintendent's proposals, making it seemingly unlikely for rank-pulling to occur.

"Maybe I am pulling rank here - when I am telling them..."L. has a more powerful sense of rank than J... L. has a more powerful sense of rank than J. L. will go away and grumble, but J. will tell me what she thinks."

The second issue extracted from the superintendents' statement about consultation was the issue of who has - or should have - "the final say" in decision-making. The superintendent had said.

"...if she has a good case I take the final decision."

This meant that the superintendent was not merely a co-ordinator of planning decisions made by the specialist teams, but she actually took the final decisions - justifying it by making her own "good case" to the staff.

## **Summary, discussion and insights - the next step**

### **Clinical decision-making**

- Basic grade physiotherapists had full responsibility for all clinical decisions relating to the patients in their care. This they meant they were given the opportunity to act as fully qualified professional practitioners. This pattern of responsibility is typical of organically structured organisations.
- Nevertheless, advice from more experienced senior staff was freely available to assist inexperienced basic grade physiotherapists in the application of knowledge and expertise in the clinical situation. Having a firm and clear structure through which advice could be obtained made it possible for those at the lowest level of the hierarchy to make decisions. The availability of advice, backed by organizational structure enhanced the organization's organic pattern of behaviour.
- Having a system through which advice was readily available - primarily the specialist team structure - enabled the service to cope with the complex issue of professional responsibilities where basic grades are fully qualified professionals and as such fully responsible for their clinical actions, but are at the same time required to "work under the direct clinical supervision of a higher graded officer in the same profession" (Whitley Council PTA 1979/para 2086). The reason for this arrangement is the categorization of "basic grades as a "learner grade". A higher graded officer (senior physiotherapists) therefore takes some kind of responsibility for the work of basic grades working in their section.

- Given the complexity of the situation I felt that the type of arrangement for receiving and giving advice made by physiotherapy managers was the most sensitive indicator of "organicity" in physiotherapy. It was this arrangement which enabled junior staff to work as autonomously as possible, as argued before. It had therefore been important to investigate the ease with which advice could be obtained.
- The actual pattern of consultation outlined by the interviewees supported the initial impression of organic style. Consultation occurred, typically for organic systems, mostly informally but also formally, with interaction between junior and senior ranks based on spirit of "co-operation", "trust" and "confidence". All of which had been found to be typical of participative/consultative systems by Lickert (1967).
- The evidence for the "organicity" of local decision-making was further strengthened by the way in which a key decision in physiotherapy - and point of tension amongst physiotherapists - was handled. This was the decision to discharge a patient. In the local service this decision was taken by the "treating physiotherapist" if she was "certain that it was right" to discharge" the patient. If the basic grade was unsure, advice was sought from senior staff.
- A reason for seeking advice from more experienced people was the high value attached to professional knowledge and expertise. High levels of knowledge and expertise enabled the physiotherapists to become more competent decision-makers, for which the "stump-bandaging" incident was a good example.
- To use all available knowledge and expertise in decision-making had been the driving force for my reforms of the service. There was now already some evidence that this ethos was being adopted by the staff. The pattern of the service confirms Lickert's study which had shown that consultative/participative systems value professional (technical) knowledge highly and use this knowledge extensively in organisation's decisions (Lickert 1967).
- Another facet of decision-making investigated was the "direction" of obtaining advice. The evidence from the physiotherapy service was that the pattern of consultation did not follow the hierarchical lines of the organisation - from junior to senior staff in the same team (from lower to higher stratum). The service had become a network structure, through which advice could be sought from anyone. Advice was sought and given by all staff and travelled in all directions: upwards, downwards and sideways.
- This network structure maximizes access to knowledge and therefore its use in decision-making.
- Lickert's research found that network structures were consistent with consultative/participative systems.

- Nevertheless, some evidence of a mechanistic type of behaviour (the stump-bandaging incident) came to light in the local service. But this was not considered to be the typical behaviour of the local staff.
- On reflection, it may have been prudent to inquire more thoroughly into any mechanistic elements of the service.
- In retrospect too, a particularly important question was not explored fully. This is about basic grades "having their own territory i.e. "their own" ward, or part of the ward, in which patients are designated as "their patients". Having an area designated as one's responsibility adds to the amount of responsibility given to basic grades. Basic grades had occasionally complained about other physiotherapy services depriving them of having their own territory. Instead, patients were allocated to them on a daily basis by the senior physiotherapist.
- Nevertheless, a clear picture of what a physiotherapy service organised in the mechanistic mode "looks like" emerged from the report of one of the basic grades. She had worked in such a service before joining the local physiotherapy service. Its mechanistic features were marked by the absence of consultation between staff of different ranks: hostility, distrust and social distance. The description was useful for contrasting and comparing organic and mechanistic patterns of organisation in physiotherapy.

### **Managerial Decision-making**

- The organic, "professional" pattern of clinical decision-making was confirmed by evidence about managerial decisions in the local physiotherapy service.
- All staff, including the basic grades, participated in managerial decisions, based on consultation via the specialist teams.
- More importantly from the perspective of the "organicity" of the service, the basic grade physiotherapists frequently initiated changes in the service by suggesting improvements to the senior staff within their team.
- This meant that the basic grades functioned as professionals who were constantly searching to improve the quality of the service by being critical about their own and their colleagues' work. Moreover, the senior staff did not appear to take offence when criticisms were made. They used the junior staff's ideas to improve the service - with the exception of "stump-bandaging" case.
- The pattern of consultation and processes surrounding managerial decision-making confirmed the organic pattern of clinical decision-making, and in particular the high value attached to knowledge and expertise as the basis of good decision-making.

Moreover, there was some direct evidence of clinical (professional/technical) knowledge prompting changes in service provision in the Special Care Baby Unit.

- A rational framework for decision-making, resting on the notion of the "well-constructed and logical case" as the basis of decision-making was identified. This ties in with the staff's self-critical approach based on using progress in clinical knowledge and experience through research to improve services for patients.
- The evidence for the existence of network structures through which advice was sought and given showed that all sorts of groups and meetings were used to feed information into decision-making. Advice travelled in all directions.
- The functions of the superintendent post - made uncertain by the devolution of planning to the specialist teams - were identified as co-ordinator between the specialist teams. The superintendents was also the main vertical channel of communication between the top and the bottom of the organisation. The superintendent also had the final say in decisions of a managerial nature.

### **Discussion - the Next Step**

- The meaning of the interview data has been discussed in the context of Hage's axiomatic theory and by using Lickert's operating characteristics. The organicity of local decision-making was highlighted by comparing local decision-making with more mechanistic forms of decision-making in physiotherapy, reported by Kinston (1981) as typical of the physiotherapy profession.
- This was a new picture of organic decision-making in physiotherapy. All staff were able to participate directly in most decisions of the service. Consultation was thought of as the essential mechanism through which clinical expertise and knowledge of how the service functions at the grassroot level could be used for high quality decision-making. Extensive consultation was made possible through diverse network structures. Interaction between staff of the same and of different ranks was marked by a spirit of co-operation, trust and confidence. Advice flowed in all directions of the networks.
- It follows that the middle stratum of the organization - the locus of clinical professional expertise - became more involved in all key decisions. The reason for this was the drive to use all professional and technical knowledge for better decision-making.

## CHAPTER THREE

### EXPLORING PROFESSIONALISM: A LITERATURE REVIEW

Introduction.

Literature surveys.

Developing a "general theory of professionalization".

Developing a concept of profession.

Analyzing a profession - from concept of profession to actor-based framework and actor-based framework and "towards a research design".

#### Introduction

The pilot study of local decision-making in physiotherapy had highlighted a link between high levels of employee knowledge/expertise and participation in decision-making. In axiomatic theory this link would be explained by the concept of "congruence" between two variables and "equilibrium" within a system. High levels of knowledge and skills ("high complexity") are associated with participation in decision-making ("low centralization"), and vice versa.

Both, policy and the local decision-making study had also suggested some kind of link between knowledge and "professionalism", which is also described from the perspective of axiomatic theory by Hage and Aiken (1969). This broadened the theoretical focus from axiomatic theory to "professionalism" as a concept and theory.

"There are two complementary aspects to complexity: the number of occupational specialisms in an organisation and the degree of professionalism of each. In other words these two dimensions of complexity reflect both extensity and intensity in an organisation. The longer the period of training for the occupations, whether formal or informal training, and the greater the number of occupations that are professionalised, the more complex the organisation".

(Hage and Aiken 1969, p.33)

In axiomatic theory the level of complexity (knowledge) of an organization is thus linked to the number of occupational specialisms - "extensity" - which might also be called breadth of knowledge in the organisation. And knowledge ("complexity") is also linked to

"professionalism" (\*), or "intensity" of knowledge, which is depth of knowledge (or specialism). Hence, intensity of knowledge (depth of knowledge or specialism) appears to be synonymous with professionalism. However, in the following quote professionalism is expanded to include other elements which inspire learning (greater knowledge).

Professionalism is "...autonomous expertise and adherence to a service ideal in which there is devotion to clients' interests more than to personal or commercial profit. It is the service ideal which impels men to seek new knowledge continually in order to serve the clients' interest more adequately...Professionalism implies an insatiable appetite for knowledge and this acquisition of knowledge leads to the recognition of how little we know...It inspires greater learning. In this sense knowledge is by definition self-generating." (Hage and Aiken 1969, p.33)

One such dimension is independent decision-making - "autonomous expertise". As we have seen in chapter two, autonomous decision-making had been formally linked to knowledge in a hypothesis of axiomatic theory: "The higher complexity, the lower centralisation" (Hage 1965, p.299). The data on local decision-making had provided some support for this hypothesis. The opportunity to take part in decision-making increased the opportunity to use knowledge which appeared to drive knowledge to higher levels of expertise, and appeared to encourage learning. It was now appropriate as a researcher/practitioner to "go within", to research the nature of professionalism and its relation with physiotherapy practice.

## Literature surveys

Extensive literature surveys were carried out in 1988/89, using the terms "professionalism", "profession" and "professionalisation", and focussing on the key dimensions of knowledge/skills and decision-making. Because the literature was vast, the searches were restricted to theoretically orientated material. This meant that some of the case studies could be excluded.

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(\*)The term "professionalism" is used here in the more general sense in which by Hage and Aiken had applied the concept in the above quote, rather than as an "ism". The term "professionalism" it will, where appropriate, be replaced later in the text by more specific terms "profession" (a specific type of occupational group); "professionalisation" (the process of becoming a profession); "professionalism" (as a "set of claims made by profession"), which are used in the literature on the study of professions.

I considered more carefully the likely direction of my research. My initial problem had been in the problem-solving domain ("problem-solving type of research" (Pugh 1978)). But, whilst trying to clarify and to narrow the problem, a likely second - and more theoretical - focus seemed to suggest itself.

For example, the practical problem of raising the physiotherapists knowledge to a "professional" level through in-house education turned into questions about the "nature" of professional knowledge. What is "professional" knowledge ? Is knowledge essential to being a professional ? If so, what kind of knowledge is it ? Is it special ? And which type of knowledge do physiotherapists use in their work ? Is the knowledge which physiotherapists "actually" use professional ?

The same thrust towards research with a greater theoretical focus applied in the second key area: decision-making. The practical management problem had been to involve the physiotherapists in decision-making by making them participate in service planning. If these intuitively-based management changes were moves towards professionalism, the questions to be answered by the literature search were, "Is the involvement of staff in decision-making an aspect of working as a professional ? If so, what kind of decisions are professional ?

At the level of national policy there was also the question whether the changes in policy which gave physiotherapists greater autonomy in decision-making, were in fact moves towards professionalism. If they were, how could the literature assist me in translating these changes into practice. And although it was clear that physiotherapists had become almost fully autonomous clinical decision-makers, there had been no guidance from the DHSS about the extent to which clinicians were expected to make management decisions about the running and planning of physiotherapy services.

The research project also required building a conceptual framework for observing the physiotherapy service and to develop an overarching theoretical framework. This meant identifying and highlighting the most significant findings, controversies and breakthroughs of earlier work, to place my research into existing work, and to avoid duplication.

The first literature surveys were carried out in 1988/89 when the research design for exploring of professionalism in physiotherapy was in progress. However, because of a lapse of time in completing the study, the original literature surveys were complemented by more recent literature reviews in 1993, which showed that a process of "rethinking the study of professions" in a fundamental way had been started in 1985.



more recent literature reviews in 1993, which showed that a process of "rethinking the study of professions" in a fundamental way had been started in 1985.

A series of international conferences, workshops and seminars of American and European sociologists and historians had been held to rethink professionalism theory. These reviews had been organised by the Swedish Collegium for Advanced Study in the Social Sciences (SCASS), which published its results in 1990 (Burrage and Torstendahl 1990; Torstendahl and Burrage 1990). The 1990 SCASS review served to order the vast, and often confusing, literature about the professions.

### **Developing a "general theory of professionalisation"**

Although the vast literature on professionalism contains many different types of theories, the SCASS reviews identified a lack of "sufficiently general theory" of professionalisation. This lack of theory is compounded by a lack of development of the concept of profession as the cornerstone theory-building (Burrage 1990).

Although the term "theory" is widely used, some so-called theories are not true theories in the sense of being a network of ideas which state the existence of relationships between a number of features in order to explain observed events. The trait theory of professions which lists and describes the "essential characteristics" of professions, but does not link any of the traits, may be considered an example of an "approach" being labelled "theory", but not being a theory in the true sense.

Collins' (1990) found this lack of theoretical development to be rooted in the "typical life-cycle of the social sciences" which does not produce "cumulation". For example, the "classic periods of professionalisation" of the early 60s and "revisionist wave" of the late 60s and 70s (which did produce theory from the power perspective), did not build upon the "preliminary period" from the 30s to the 50s (the trait approach)

An example of this is Johnson (1972) who pronounced that "occupational practice can only be understood in terms of the prevailing type of control" (the power perspective), rather than in terms of "essential characteristics" (the trait perspective).

This recognition of a lack of theory, combined with a recognition that "early theorizing rested on narrow, ethnocentric evidence" (Burrage 1990), has now led to "moves towards a theoretical analysis of the professions that can accommodate both historical and cross-cultural comparative evidence (Burrage 1990; p.203). Burrage points out that it is

nevertheless not at all clear how "a historical professionalisation theory" is to be constructed, or "how generalizations are to be extracted from the rapidly accumulating empirical evidence" (Burrage 1990; p.203).

However, as a starting point he suggests "to bring some order to the discussion by mapping ...parameters, identifying the key actors engaged in the struggle of occupations to establish themselves as professions, noting the varieties of their relationships and indicating, wherever possible, areas of emerging agreement as well as points of dispute" (Burrage 1990; p.203). The preferred approach to theory-building is "inductive", using the vast amount of unlinked empirical work of the professions, including the many case studies, to extract generalizations for theory-building (Burrage 1990).

Thirdly, those engaged in the SCASS reviews identified an "over- emphasis" of research into the institutions of professions (such as the study of professional associations) at the expense of analyzing actual professional practice.

This re-assessment of the state of theory about the professions put the likely contribution of my research into the context of the general thrust of contemporary theoretical developments.

My contribution was likely to be an investigation of actual professional "practice" because as the manager of a professional service I was ideally placed to explore professional practices. Analyzing "practice" contributes especially to the study of professions because "practice" had been identified as an area of scarcity of research.

My research focussed on two dimensions: knowledge and decision-making, which had so far been treated in research from two different and seemingly unlinked perspectives (the trait approach and the power perspective). There was now possibly an opportunity to address the weaknesses of present theory by using Burrage's "actor-based framework" as the model for studying the physiotherapy profession (Burrage 1990). This framework integrates the traits of professions and political aspects of professional life in a model for studying professions.

The discussion of concepts and theories of professionalism proceeds by producing an overview of the concept of profession ("what a profession is"), which is linked to the "actor-based framework" (Burrage 1990) and its suitability as the theoretical framework for this research project.

## **Developing a concept of profession**

Like the theory of professionalization, of which the concept of profession is a fundamental part, the concept continues to be seen as "troublesome" (Burrage 1990). This is so in spite of the fact that the many problems of defining "what a profession is" have been highlighted for nearly thirty years. For example thirty years ago, Millerson commented on the difficulties of the concept of professionalism in the following way.

"Of all sociological ideas, one of the most difficult to analyse satisfactorily is the concept of professionalism. Perhaps three basic problems account for the confusion and uncertainty. Firstly, there is a semantic confusion, resulting from a wide and excessive use of the word. Secondly, there are the structural limitations enforced by attempts to devise fundamental characteristics of a profession. Thirdly, there is adherence to a static model, rather than an appreciation of the dynamic process involved in professionalism".

(Millerson 1965, p.5)

Twenty-five years later these difficulties were echoed by Burrage and Torstendahl (1990) following the SCASS reviews.

"There can be few areas of social inquiry that have become so involved, distracted and perplexed by matters of definition than the study of the professions" (Burrage 1990, p.204),

However, in the eighties and nineties the difficulties of definition were compounded by a more cosmopolitan consciousness in the social sciences, prompted by the more international environment of the EEC and OECD and freer movements of labour. National differences in the organization of professions and in professional activity led employers and sociologists to ask, "What is a profession ?" Is a profession the same in Germany, France and Britain ? It led European and American sociologists and historians of the professions to prefer "comparative analyses beyond the English-speaking world". (Burrage and Torstendahl 1990, p.204), rather than to continue with work based on "narrow ethnocentric approaches" (Burrage 1990).

But, defining the concept of profession does not only mean asking, "What is a profession ?". It requires a more specific or detailed question to be asked. "What are the essential characteristics which distinguish professions from occupations which are not professions ?" The term "essential characteristics" refers to the trait approach which dominated the early ("preliminary") (Collins 1990) period of the study of professions from the 1930s onwards.

Trait theorists saw the task of analyzing professions as defining the essential characteristics of professions. For example, Carr-Saunders and Wilson (1933) state that, "Profession...is a complex of characteristics. The acknowledged professions (law and medicine) exhibit all or most of these features; they stand at the centre, and all around them on all sides are growing vocations exhibiting some but not all of these features" (p. 30).

Similarly, Parsons (1954), having been engaged in a study of the medical profession, shared Carr-Saunders' and Wilson's view about the "central characteristics" of "acknowledged professions", and "other less developed professions", which "exhibit some but not all of the essential characteristics of professions". This view meant that professions were defined in an "ideal-type" manner as "acknowledged" or "lesser" professions based on the presence or absence of traits defined as the measure.

This early and influential period of research into the professions was surveyed by Millerson in 1964, who found twenty-three traits of professions in the literature. Some of these traits will be discussed in detail here because the knowledge produced during this early period is still valued and used today (Burrage 1990).

Burrage believes that lists of traits are "indispensable for analyzing the process or professionalization". Rather than working with "some vague evolutionary notion of "more or less", traits enable us to "dissemble the elements of professionalisation for the purpose of analysis and identifying alternative routes and critical stages" (p.205). Nevertheless, Burrage does not advocate that professions should be defined by traits alone. Traits need to be distinguished by type of trait ("essential" and "strategic") in accordance with their function and they need to be incorporated into a more general theoretical framework, such as his "actor-based framework". (The details and usefulness of this framework for my own research will be discussed later in this chapter.)

The biggest cluster of professional traits identified by Millerson were knowledge and skill categories: "skills based on theoretical knowledge; practice modified by general knowledge; the application of principles to concrete professional practice; foresight based on theory, theory based on understanding and the application of skills to the affairs of others" (Millerson, p.5).

Millerson's own definitions of profession reflect this emphasis on knowledge as a chief aspect of his definition of profession. "A profession involves a skill based on theoretical knowledge...and this competence is demonstrated...by passing a test." (Millerson 1964, p.4). "A profession is a higher grade, non-manual occupation, in this context, implies that

the intellectual, practical technique involved depends on a substantial theoretical foundation...to provide competent service, knowledge and experience must be obtained." (Millerson 1964, p.9)

Earlier in the thirties, Carr-Saunders and Wilson had identified "the application of an intellectual technique" as the "chief distinguishing characteristic" of professions. This view was - and is still - shared by others who included knowledge in their definitions of profession, either as a core element or as one of a number of elements defining professions (Millerson; Goode 1969; Moore 1970; Torstendahl 1991; Ovretveit 1992)

Millerson's idea of different types of knowledge traits which add up to "what a profession is" (the concept of profession) was useful and stimulating for this research into professionalism. For a manager whose task it was to "translate" a national policy which promoted professionalism into local physiotherapy practice, a list of knowledge categories which could be translated into the local education program was certainly useful. "Professional" type of knowledge could be promoted through local training programs.

The second largest cluster of traits listed by Millerson centres loosely around the traits of ethical beliefs and behaviours associated with the "altruistic service ideal". These beliefs and behaviors are: "putting clients' interests before one's own" (altruism) ; adherence to a professional code of conduct; loyalty to colleagues; members prepared to contribute to professional development; best impartial service given; fiduciary client relationship" (Millerson, p.5).

Like the knowledge traits, ethical beliefs and behaviours have played a prominent role in subsequent literature, where altruism is either a core element or one of a number of elements of professions. So, Goode (1969) took the service ideal to be one of two "core elements" - the other being the knowledge base. Ovretveit (1992) concluded that "the fundamentals of ideal type [profession] appear to be a knowledge base, a service ideal, and autonomy granted on the basis of public trust" (p. 192). But Krause (1971) who, like Ovretveit, debated the concept of profession from the power perspective, included "a code of ethics" as a "key feature" of his definition of profession. Other elements were "central skill, group culture, occupational authority, and permission to practise on the part of the community".

As to the functions of the service ideal, Barber (1963) believed that its function is "to control individual behaviour". The service ideal is "internalized in the process of work (socialization) and a system of rewards (monetary and honorary)". Tawney (1972) and

Durkheim (1964) theorized about the effects of altruism on the whole of society, stressing the function of ethics in regulating a "moral community".

The issue of professional ethics was, of course, not a key dimension of this study, although the ethics contained in physiotherapists' code of conduct influences their behaviour. The question of ethics was therefore kept in mind. The profession's awareness of professional ethics had been raised at a time when responsibilities were increasing with changes in knowledge and decision-making. A landmark in the profession's consciousness of ethics had been raised in a congress lecture and article by Purtillo (1987), American Professor of Ethics and physiotherapist.

Up to 1964 (the time of Millerson's survey) "independence" as a trait of professionalism had only been investigated by Lewis and Maude (1952). Knowledge and altruism appear to have been of greatest interest to the early trait theorists. However, "independence" - the third category of traits in Millerson's compilation of essential elements - became the focus of the key debates about the professions during the theory-forming "classic" and "revisionist" periods. The 1960s and 1970s being the heyday of the "power perspective".

Those who analysed the professions from the new "power perspective" criticized and, generally dismissed trait theory, because independence was of "fundamental significance" to the power theorists (Freidson 1970a). Thus, Freidson stated that..."all other institutional elements that are included in most definitions of professions" can be derived at from the single condition of self-direction or autonomy". And Johnson (another prominent power theorist) asserted that "occupational practice" could "only be understood in terms of prevailing type of control" (Johnson 1972).

Autonomy, which manifests itself in decision-making had been chosen as the second key dimension of this study. Like knowledge, independence will be discussed later when the development of autonomy in the physiotherapy profession is analysed from the perspective of the actor-based framework. The development of this independent decision-making in physiotherapy is analyzed in chapter seven.

Fourth, Millerson lists a number of traits which later fall into category which later (in 1990) been described as "institutional elements of professions" (Torstendahl 1990). They are: "the provision of training and education supervised by professional organisation; recognised status; definite compensation (i.e. fee or fixed charge); profits not dependent on capital; guaranteed service raises association's prestige thus securing employment and improving income" (p.5).

The trait perspective has its critics. Some believe that the "decision about which element to include depends entirely on which profession is viewed as having professional status" (Ovretveit 1992), which makes the process of defining an occupation as a profession "a largely arbitrary decision" (Ovretveit 1992).

A second - and major - criticism is that the "claims made by professions", such as their claims to "special knowledge" or "altruism" are, in fact, ideologies produced by professions themselves. As ideologies they are not "real" in the sense of essential elements being "real" descriptions of professions. They are merely the "false" claims made by professions to further the interests of professions.

However, Burrage discounts this argument by making the point that the claims of professions become accepted by the public and the state - and in this sense become real. It seems therefore that a "satisfactory definition will have to include both the institutions and the claims of professions" (Burrage 1990). It also seems that a phenomenon can be both: real and ideology. Professions may possess special knowledge which they use to solve their clients' problems; they may also use this knowledge to promote their self-interests.

Many of the major criticisms of the trait perspective have been have come from those who favour the power perspective (Freidson; Johnson; Krause), although not all power theorists reject the trait perspective outright (for example, Krause 1971).

Nevertheless, Krause (1971), a power theorist incorporated the major "features" of professions (traits) into his power analysis. He suggests that professions shared features with all occupations ("central skills, code of ethics, group culture, occupational authority and permission to practise on the part of the community"). What distinguishes them from occupations is the degree to which these features were present. The "degree" of these features is "very high" in professions, but not in occupations. This implies the idea of a "continuum" high-low professionalism, ending at the low side in occupations. Also, being "near to the key places in the division of labour" enables professions to produce professional features of a "high degree".

Krause's ideas were interesting, mainly because they foreshadowed the broader concepts of profession developed by the SCASS reviews, which were used in this research. "Essential traits" (such as skills based on theoretical knowledge) are distinguished from "strategic" elements (such as place in the division of labour) which the professions use to gain power.

Secondly, Krause suggests that professions align themselves to power ("key places" in the division of labour) to further their own interests, which is a key aspect of the power perspective. This idea is similar to the idea of "strategic" elements but here the focus is the wider environment which impinges on the professions, rather than elements within the immediate sphere of the professions (the actions of the professions themselves).

The idea of professions negotiating with the those who have power outside the immediate professionals domain also foreshadows Torstendahl's (1990) more recent concept of profession. This includes "contingencies" which impinge on the professions (such as the state) with whom, and against whom, the professions use their strategies to maintain or further their interests.

Thirdly, Krause's idea of the high or low presence of traits returns the discussion to the earlier quote by Carr-Saunders and Wilson. The "acknowledged" and "lesser" professions, which have been a major debate in the study of professions, based on Etzioni's concept of "semi-profession" (Etzioni 1964 and 1969). Physiotherapy carries the label of "lesser" or "semi-professional" or "para-profession".

Torstendahl and Burrage (1990) had expressed reservations about the use of the concept of semi-profession, based on the argument that the concept rests on a "false assumptions". This false assumption is the argument that all professions can be assessed either as profession or non-profession by comparing them with an ideal-type profession such as the medical or legal professions ((as outlined earlier by Carr-Saunders and Wilson). If a profession falls short of the ideal-type it is downgraded as semi-professional. This approach is now considered to be "ethnocentric" (Burrage 1990) because it is built entirely on the tradition of research of professions in Britain and the United States, where the ideal typical approach has been dominant.

Torstendahl and Burrage (1990) therefore urge social scientists "not to take for granted that we know what a profession is", but to make the study of the professions "more open and complicated". As an occupational grouping professions might consist of "specific types", rather than lesser and acknowledged professions and the work of modern social science is therefore to look for "specific types of professions".

The idea of professions as "specific types" was therefore kept in mind pending the analysis of the physiotherapy profession's relationship with the state and the medical profession, and the evaluation of my research into actual professional practice in the light of the politics of health.



However, more "satisfactory" concepts of professions have evolved following the SCASS reviews. Burrage' acknowledges Kocka's definition of profession (quoted below) as a "satisfactory definition of profession" and "adequate tool for research". The concept combines "strategic", "institutional" and "essential" elements in its definition. Kocka states that,

"Profession means largely non-manual, a full-time occupation whose practice presupposes specialised, systematic and scholarly training...access depends upon passing certain examinations which entitle to titles and diplomas, thereby sanctions its role in the division of labour...(Professions) tend to demand a monopoly of services as well as freedom from control by others such as laymen, the state etc...Based upon competence, professional ethics and the special importance of their work for society...the professions claim specific material rewards and higher social prestige."

(Kocka 1988a; p. 102)

This definition of profession consists of institutional (strategic) characteristics in the first half, which are: "non-manual, a full-time occupation whose practice presupposes specialised, systematic and scholarly training...access depends upon passing certain examinations which entitle to titles and diplomas".

The second half contains the "demands" of professions: "demand of monopoly of services, freedom from control by others such as laymen, the state etc."

And their "claims" are also stated in the second half as: "competence, professional ethics, special importance of work for society, specific material rewards and higher social prestige."

According to Burrage, the advantage of this definition is the ability to "distinguish between the characteristics that describe occupations" and the "demands and claims" made by professions. It also contains "criteria for recognizing both" (Burrage 1990).

A second advantage of Kocka's definition of profession is its concreteness. Being fairly concrete, makes it easier to "operationalize" the concept (Burrage 1990).

Burrage therefore suggests that this definition is "probably best to work with in the absence of any supra-historical or cross-cultural definitions which can be applied with a consistent meaning to various historical and cultural settings" (Burrage 1990). Being relatively

concrete and specific also ensures "awareness of the shifts in meaning or emphasis", and the possibility of identifying those elements that tend to be constant and those that are more variable" (Burrage 1990).

However, Torstendahl (1990) widened the concept by introducing an additional component into the definition of profession. Like Krause, Torstendahl believes there is a need to identify the "contingencies" which influence or determine the "specific combination" of "properties" and "strategies" at a "particular point in time".

"Contingencies" are aspects of the environment which affect ("impinge on") the behaviour of professions. For example, in Krause's concept of profession, a profession's position in the division of labour is a contingency. In the case of physiotherapy, Alaszewski's analysis of physiotherapy had shown that the state's "economic rationality" of the state was a contingency which "impinged on" the progress of the profession of physiotherapy.

In Torstendahl's concept of profession these contingencies are "historical" in the sense that they vary over time and therefore lead to specific combinations of "properties" (such as levels of knowledge and skills) and "strategies" (such as the pursuit of more or less autonomy). This idea introduces a dynamic element into the analysis of professions as a profession.

The idea of specific combinations of different professional dimensions of profession being determined by a contingency is similar to some fundamental ideas in Hage's axiomatic theory. In axiomatic theory the balance ("equilibrium") in the system (such as the balance between the degree of knowledge and participation in decision-making in the organization) is determined by the environment in which the system functions. This idea could now be translated to professions as a system, in which an "essential property" of professions (such as knowledge) and a "strategic aspect" of professions (such as decision-making) might be determined by factors outside the profession (such as the state's economic rationality underlying the shape of NHS policies).

### **Analyzing a profession - from concept of profession to actor-based framework and "towards a research design"**

In earlier discussions of the concept of profession, the "actor-based framework" had been quoted as a sufficiently "inductively-grounded" and "broad" framework for research into "what a profession is" (Burrage 1990). As an interactionist type of model it identifies the

"actors" who determine success or failure of the profession, their "goals" (interests), and the "resources used" in the pursuit of their interests.

Based on earlier research, "goals" are specified as: "self-control" (autonomy) and three types of "resources" used by professions in their pursuit of goals are identified by Burrage: "organization", "knowledge about" the intricacies of procedures used professional practice, and "persistence" in pursuing professional goals. "Patterns of interaction" are charted using these concepts, with a view of "classifying and comparing different professions" according to their "particular peculiarities" (Burrage 1990).

The actor-based framework seems to be seen as the basic building block (Burrage 1990) for the development of theory and concept, but Burrage does acknowledge its limitations. Analyzing patterns of interaction can not "explain" how and why the actors interacted to shape a profession "; it can however be a means to "describing" how and why the actors interacted to shape the profession (Burrage 1990). It permits researchers to "construct initial checklists" of "resources" at the actors' disposal, their "goals" and "patterns of interaction". These data can give us then the "specific peculiarities of a particular profession" which may help us discover more general patterns of specific professions and to construct patterns into which specific professions fall.

A possible theoretical aim of this study of physiotherapy was therefore to attempt to discover some "specific peculiarities" of this specific (physiotherapy) profession by case study. This included analyzing its national policy framework and the degree of professionalism of its actual practices. Nevertheless, my practical problem-solving aims (implementing professionalism locally) continued to be as important as my theoretical aims, which resulted in a continuous tension between the theoretical interests and the practical problem-solving aims.

It was clear at this stage of designing the study that it would not be possible to "generalize" from the "specific pattern" of physiotherapy to discover "more general patterns into which specific professions fall" (Burrage 1990). Such a task requires comparisons with other similar professions, such as other "remedial professions" within the framework of the Council for the Profession Supplementary to Medicine (CPSM).

This was beyond the remit of this study for theoretical and practical reasons. Firstly, from a practical point of view, the amount of investigation required to analyze one profession within the time constraints of doing part-time research and busy management job made it impossible to analyze other professions in a similar way.

A second and important theoretical reason was however the present neglect of research into the practices of these smaller professions. Like physiotherapy, other comparable professions (like occupational therapy or speech therapy) have not reflected extensively on their own professional practices, let alone used the concepts contained in the actor-based framework. Like physiotherapy, these professions are "under-researched", possibly because until fairly recently, research had not been considered an essential aspect of professional practice. Where research is being carried out, clinical topics prevail.

It could be argued that it may have been possible to extract some strands of the necessary information about these professions from various studies, but my literature searches of the "professions supplementary to medicine" (and particularly of the professions which compare most easily: occupational therapy and speech therapy) showed that appropriate research of the key areas of my study of physiotherapy did not exist.

### **Modifying the actor-based framework**

Another advantage of the actor-based framework was its broadness and flexibility, which allowed the various strands of my complex, multi-faceted research problem to be integrated into one overarching framework. At the same time, the model was sufficiently flexible to allow modifications where it was conceptually inadequate for the purposes of this study.

An area of special conceptual inadequacy turned out to be the professional knowledge-base underlying professional practice. Based on the policy changes in physiotherapy knowledge and the results of my initial studies and literature searches, it seemed that a special type of knowledge was used in professional practice, which was therefore an area of special interest. My understanding, so far, was that this knowledge was "substantially theoretical" (Millerson 1964) and "intellectual" (Millerson; Goode 1969; Moore 1970; Torstendahl 1991; Ovretveit 1992).

However, the only type of knowledge included in the actor-based framework was "knowledge about" the "intricacies" and "procedures" of professional practice (Burrage 1990). Although this type of knowledge is used during the application of "theoretical", intellectual" knowledge in professional practice ("professional knowledge system" (Torstendahl 1990)), it is not the same as the professional knowledge system. But in spite of Burrage distinguishing between the two types of knowledge as "knowledge of" and "knowledge about", the former was not included in the actor-based framework. "Knowledge of", which will be discussed and analyzed extensively in chapter five, was

therefore included in the actor-based framework as an additional type of knowledge to "knowledge about".

This understanding of how different kinds of knowledge are used as "resources" seemed particularly important for the advancement of local professionalism - "the politics of knowledge" - given the non-mandatory character of the DHSS directives. Legislators may legislate to very little practical effect. What really makes a difference to a profession is whether or not the changes intended by the legislators become reality in professional practice. This depends on the knowledge and political skills of local managers.

A second modification to the actor-based framework was Torstendahl's contribution to the concept of profession: the idea of "historical contingencies" which determine the "combination of essential and strategic elements". An important contingency seemed to be the "economic rationality" which has influenced the state's direction of the NHS since 1948 and whose effect on physiotherapy and occupational therapy had been analyzed by Alaszewski (1978).

### **Using the actor-based framework as a framework for analyzing physiotherapy as a profession**

It will be useful now to list the key areas of my research and to show how it was possible to incorporate the various strands of the research problem by using the actor-based framework.

#### **The decision-making dimension: national policy focus**

Taking the decision-making dimension first, this dimension had a national (policy-making) and local focus. The national policy thrust towards professionalism had prompted the question of "how to translate and implement national policy locally".

Given the thrust towards professionalism, the point of departure for the analysis of national policy had been to gain understanding of "what was meant by professionalism". As a manager I understood professionalism in some intuitive way, but as a researcher my understanding had to move from a relatively vague intuitive sense to a clearer conceptual understanding. This had already been partly achieved by my earlier inquiry into the concept of profession where autonomous decision-making had been identified as a fundamental aspect of professionalism. I had gained a sense of professional type of decision-making as it might be practised in work through the initial study.

The actor-based framework was useful for the analysis of national policy because it was possible to examine patterns of interaction between the physiotherapy profession and the two other parties involved in negotiating autonomy: the state and the medical profession. The relevant concepts used in this part of the analysis of physiotherapy were: the "actors" and their "goals" ("control"), the "resources used" in the pursuit of control: "organization" and "knowledge".

Understanding national policy was expected to yield not only an interesting theoretical analysis, but to be practically useful for promoting professionalism locally. For example, if "knowledge about" the practices of the profession (a "resource") could be shown to have been "an immense source of power for the profession" (Burrage 1990) at the national level, it might also be possible to use this type of knowledge locally to promote autonomy.

### **The decision-making dimension: local practice focus**

Following the data collection about local decision-making and their interpretation from the perspective of Hage's axiomatic theory, how decision-making is structured in physiotherapy (organic or mechanistic) remained the focus of this research. Team structures seemed to be an aspect of organic type of decision-making. The initial study had shown links between organic structure and an infusion of clinical expertise into decision-making processes. Both, "knowledge of" (clinical knowledge) and "knowledge about" professional practice and organizing the context to clinical work at the grassroot level of the service had been used in planning future physiotherapy services.

There was now a sense that the involvement of clinicians promoted professionalism in physiotherapy, not only because the decision-making scope of the clinical staff were extended, but also because their knowledge base was enlarged.

### **The knowledge dimension: conceptual analyses and empirical work**

The second dimension of this study: knowledge, contained two areas of inquiry. One set of questions centered around the extent to which physiotherapy practice was based on types of knowledge contained in a professional knowledge-system. This had to be understood first, the key question being, "What distinguishes the knowledge used by professionals from the knowledge used by non-professional groups?"

This area of inquiry was to proceed by extracting the key categories of professional knowledge systems from the literature about the professions.

The categories were then tabulated and used in two pieces of analysis of the profession. The first was a theoretical analysis: an examination of the literature about physiotherapy practice and education, whose purpose it was to get an overview of professional opinion about the extent of professionalism in physiotherapy.

The categories were then further tested against actual physiotherapy practice in interviews with highly experienced senior physiotherapists. On the basis of this work four "typologies of knowledge and skills" were constructed.

The "practice-adjusted" typologies of knowledge and skills were then used to test professional practice in the local physiotherapy service in the main empirical work of this research project.

A "summary of the study's aims" (its overall theoretical and practical aims and specific objectives) and an overview of the research methods used (the research design) are outlined in chapter four (Methodology of the Study).

## **CHAPTER FOUR**

### **METHODOLOGY OF THE STUDY**

#### **Introduction.**

Summary of the study's aims and overview of research methods (research design).

Doing research as a manager and practitioner - rationale for choice of approach.

Coping with the possibility of bias due to research role.

Overrapport and oversocialisation.

The process of data collection - interviewing.

Group interviews and interviews with individuals.

Group Interviews - the rationale for group interviews.

The process of group interviewing: a problem of structure and skills.

The format of the local group interviews.

Interviews with individuals: the rationale for semi-structured in-depth interviews with individuals.

The process of interviewing: degree of structure.

Timetable of empirical work.

#### **Introduction**

Having outlined the usefulness of the "actor-based framework" as a framework for this study of physiotherapy as a profession, the first part of this chapter is a "summary of the study's aims and overview of research methods" (its research design).

This is followed by a discussion of my special research role as manager of the organization being researched and as a member of the profession being investigated. "Doing research as a manager and practitioner" discusses this complexity of research role and how my management position may have influenced the overall perspective of this study. This is followed by a discussion of possible sources of bias during data collection due to role conflicts.

The details and problems of the actual data collection (such as the problems of the structure and process of group interviews and of interviews with individuals) are outlined next. The introduction to the section on data collection contains a timetable of research work.



## **Summary of the study's aims and overview of research methods (research design)**

The areas of research, which have up to now been discussed from the point of view of the theoretical usefulness of the actor-based framework, will now be summarized from the perspective of the research design. Although this will obviously repeat some ideas, it will give a clearer overview and more precise statement of the objectives of the research project without the distractions of the arguments about the merits of the actor-based framework.

### **Overall aims**

The overall aims of the study were twofold. The first set of objectives could be loosely termed practical in the sense that I hoped that research might yield useful knowledge and insight to solve my managerial problems.

The second set of objectives were academic and theoretical in the sense that the study attempted to contribute to the development of theory of the study of professions through its choice and handling of the theoretical framework and the results of the study. Another contribution to theory-building lay in the fact that aspects of my research project investigated "how professional work proceeds in this limited daily context" (Svensson 1990), i.e. practice, which had been identified as an area of scarcity of research.

Both objectives were considered to be equally important and were thought of as producing a useful tension between theoretical, academic interests and the practical interests in solving problems. The best outcome was therefore considered to be one in which theory would contribute to practice and practical problem-solving to the building of theory.

### **Practical aims**

The study had two practical objectives:

- to gain knowledge and insights through research in order to solve local management problems, based on a theoretical understanding of professionalism. The aim was to generate a "model" (\*) or set of recommendations for the physiotherapy profession which would facilitate the implementation of professionalism in physiotherapy;

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(\*) The term "model" is used in the sense of a set of recommendations which managers might follow for producing their own local solutions, rather than in the tighter theoretical sense of "mapping elements in a system" (Bullock and Stallybrass 1977).

- to explore the implications of my research of professionalism in physiotherapy in today's NHS.

### **Theoretical aims**

The theoretical aims were:

- to describe the "peculiar characteristics" of professionalism in physiotherapy as a "specific profession".
- to produce a case study of physiotherapy as a specific profession which contributes to the development of the study of professions by investigating how professional work proceeds in this daily context (practice);
- to explore any links between professional "practice" to its national policy-making context;
- to test the suitability of the actor-based framework for studying a profession;
- to assess the success of modifying the actor-based framework.

### **Specific objectives (knowledge dimension)**

Within the context of the overall objectives the specific objectives for the knowledge dimension were:

- to extract knowledge categories which distinguish professions from non-professions from the literature about the knowledge-base of professions;
- to use the knowledge categories extracted from the literature for testing the literature about the professionalism content of physiotherapy practice;
- to construct "practice-adjusted" typologies of knowledge and skills.
- to test the physiotherapy-specific typologies of knowledge in the local physiotherapy service as the major empirical work of this research project.

### **Specific objectives (decision-making dimension)**

Within the context of the overall objectives the specific objectives for the decision-making dimension were:

- to gain conceptual understanding of the decision-making scope in the physiotherapy profession by analyzing national physiotherapy policy-making, using the concepts of the actor-based framework;

- to explore nature and scope of decision-making in physiotherapy practice in the setting of the physiotherapy service which I managed;
- to explore the organizational structures of the physiotherapy service which I managed.

## **Overview of research methods**

The research methods used mirror the complexity of this multi-faceted research problem, manifested in the use of a mixture of conceptual analyses and empirical investigations. In the empirical investigations of local physiotherapy practice, the research methods were predominantly qualitative (by interview). The interview data were supplemented by my direct observations as a "participant observer" working in the organization and the profession, and by documentary evidence from the local service.

### **Conceptual analyses**

Conceptual analyses were employed to analyze national policy-making, based on the actor-based framework. Documentary evidence (mainly policy documents) as well as some literature about the development of physiotherapy policy were the materials to which the concepts of the actor-based framework were applied.

Another piece of conceptual analysis was the extraction of knowledge categories used by professionals in their work from the literature about the professions. These knowledge categories were "adjusted" by practice wisdom gained through group interviews with practicing physiotherapists. This piece of analysis therefore straddles the divide between predominantly conceptual work based on documentary and literature analyses and empirical research. The outcome were physiotherapy-specific typologies of knowledge and skills, which were used as the basis of semi-structured in-depth interviews. A third piece of conceptual analysis was the analysis of the knowledge-base of physiotherapy as it manifests itself in the literature about physiotherapy (documents and professional opinion), relating to its training, its methods of treating patients, its type of research and theorizing.

### **Empirical investigations**

Two types of qualitative methods of data collection were used to investigate the practice-orientated aspects of the research project. These were semi-structures in-depth interviews and group interviews about professional practices in the local physiotherapy service.

The unit of analysis for the empirical work was therefore the local physiotherapy service (a case study of the organization) (\*). However, the entire study, (which includes the conceptual analyses of physiotherapy policies and knowledge systems, based on documentary evidence and literature about professional practice), is based on the profession (of physiotherapy) as the unit of analysis.

All methods used in the study, the rationale for their choice and the problems and details of fieldwork are discussed later in this chapter.

### **Doing research as a manager and practitioner - rationale for choice of approach**

The methods used in this study were similar to the blend of methods described by McCall and Simmons (1969) as participant observation (\*).

"...a characteristic blend of methods and techniques"...involving "some amount of...social interaction in the field with the subjects of the study, some direct observation of relevant events, some interviewing... some collection of documents and artifacts, and open-endedness in the directions the study takes".

(McCall and Simmons 1969)

In this study the "characteristic blend of methods and techniques" consisted of interviews with individuals as well as with a group of physiotherapists and direct observation as a participant observer and "genuine member" of the organization, which were included comments in the interview data sections ("Results" chapters). These data were supplemented by documentary evidence from the service.

Using this blend of methods was based on the "nature" of the project: research carried out by the manager of the organization which is the subject of research, and in the profession in which the researcher is a practitioner. This and other considerations discussed later

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(\*) "The unit of analysis refers to the level of aggregation of the data during subsequent analysis [the study's focus of analysis as stated in the "problem statement"]...even though we may gather relevant data from individuals..." (Sekaran 1984; p. 74/75).

(\*) McCall and Simmons label this mixture of research methods "participant observation and distinguish it from a narrower definition of participant observation - "a technique in which the scientist virtually performs the role of genuine member and counts as critical data his resulting experiences which provide leads to be pursued by interviewing his fellow participants" (McCall and Simmons 1969; p.1).

provided reasons why the study needed to be based on a predominantly phenomenological (\*) approach.

Firstly, the predominantly phenomenological approach provided the flexibility ("open-endedness in direction") which was required by this particular - and special - research situation. Doing research as a manager meant that the conception of the research problem was affected by the pressures and demands of the management job. For example my employer, who was employing me in the first instance to manage the physiotherapy service, considered research to be "a luxury" - unless research produced some tangible improvement in the organization. A flexible approach was therefore needed to be able to respond to the changing demands of the management situation. The research project needed to be conducted in such a way that it was possible to "adjust" to the requirements of the most pressing management problem.

My own job satisfaction survey, which is not included in this research report, is a good example of how research had to "fit in" with the "work to be done", and how the direction of the research project changed as the result of my most pressing management problems. Job satisfaction had appeared to be one of the most important management problems at one time because it had been difficult to recruit staff. It was therefore researched with the intention of using the insights gained from the job satisfaction survey to improve local recruitment opportunities. However, job satisfaction ceased to be the focus of the research project because the local recruitment problems were solved "by a stroke of luck". Refining the quality of the physiotherapy service by increasing the physiotherapists' professionalism became more important and also more interesting.

Within the overall context of management problems which drive research, one of my special consideration was also the scarcity of my own time. The research project was to be carried out in addition to my full-time management job in a rapidly changing NHS, and in addition to domestic responsibilities. Therefore, to minimize the time spent on research, the problem to be studied had to "fit in" with my management problems. In this way - so it was thought rather naively in retrospect - the "time spent" on research might be offset by "time saved" by solving management problems with the help of research.

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(\*) The term "phenomenological" is used here as defined by Easterby-Smith, Thorpe and Lowe (1991) who describe the approach as "using multiple methods to establish different views of phenomena", in order to "try to understand what is happening" and "to focus on meaning", as opposed to the positivist approach where "concepts are operationalized so that they can be measured" and where the "focus [is] on facts" (p.27).

My own experience of the tensions between the practical considerations of solving management problems and doing research was confirmed by the literature about this special field of management research. Easterby-Smith, Thorpe and Lowe (1991) and Sekaran (1984) confirm that initial research problems tend to change in response to the imperatives of the practical situation in which the research project is carried out. Easterby-Smith, Thorpe and Lowe thus urge researchers to adopt flexible approaches based on phenomenologist methods. In Easterby-Smith's words, "qualitative methods are more likely to contain the ability...to adjust to issues and ideas as they emerge" (Easterby-Smith, Thorpe and Lowe 1991), which produces "open-endedness in the directions the study takes" (McCall and Simmons 1969).

Easterby-Smith, Thorpe and Lowe also linked this open-endedness of approach to the "potential for action" of management research. Potential for action is thought of as a "distinctive aspect of management research", which was important in this study. Managing requires thought and action and "managers feel that research should lead to practical consequences" (Easterby-Smith, Thorpe and Lowe 1991). Therefore, "research methods either need to incorporate within them the potential for taking action, or need to take account of the practical consequences that will probably ensue" (Easterby-Smith, Thorpe and Lowe 1991; p. 6).

This requires research which is predominantly based on qualitative methods because this approach provides a "much wider range of options and ideas in order to guide future actions" (Easterby-Smith, Thorpe and Lowe 1991). This is particularly important in research geared towards national (social) policy (Easterby-Smith, Thorpe and Lowe 1991). In this study, analyzing physiotherapy policy and practice was expected to yield a practical management model which might make it possible for other managers to improve the professionalism of service delivery.

Finally from a practical point of view, the choice of the research problem and its methods was influenced my role as a practitioner in the profession being researched - the third aspect of my role. My professional association - the CSP - had an interest in my choice of topic because it had provided some funding. It was the wish of the Society, and also my wish, that my research should produce knowledge which had the potential of making a significant contribution to the progress of the profession. Hence, my choice to analyze physiotherapy practice in the context of national policies.

National policy-making, whether it is made by the professional association, or by the DHSS in association with the professional association, sets the context for changes in the

profession. It provides the thrust for change and the reason for finding a model of professionalism. A predominantly qualitative research approach was necessary to allow "ever more fruitful areas of investigation...to evolve" (McCall 1969).

### **Coping with the possibility of bias due to research role**

It might be assumed - even without any reference to the literature on research methods - that data collection might be biased when the informants are also the employees of the researcher/manager because they may not have told the truth during research interviews. To guard their own interests, they might have reported what they believed the manager "wants to hear", rather than what they "really believe" or observe.

Similarly, the researcher/manager might produce bias. The interviewing of employees might not be sufficiently searching because critical and persistent questioning might disrupt previously harmonious relationships with employers. The manager's familiarity with the organization under investigation might also have made it difficult to observe events with the sufficient clarity.

Research may also have produced negative or embarrassing data which can affect the manager's self-confidence, and result in "adjustments" at the stage of interpreting and reporting of the data.

To make an assessment of the validity of these concerns a literature search on the triple role as researcher, manager and practitioner, and its effects on data collection and interpretation was carried out.

The search showed that this type of research role and its possible special effects on the research process have so far not been discussed in the literature. Although "management research" has been discussed recently as distinctive type of research (Easterby-Smith, Thorpe and Lowe 1991; Sekaran 1984), management research "by managers" has, as yet, not been described as a specific sub-discipline.

However, my literature search on the more common "single" research roles was used to speculate on and monitor my own more complex (triple) role as researcher, manager and practitioner. The literature on "role theory in research" and how "role imbalances" produce biased data collection and data interpretation seemed especially relevant.

Role imbalances usually refer to disequilibrium between self-role and the research role. Gold (1969) defined the self-role as the "self-expression" and "self-integrity" of the researcher and the research role as the "information-gathering role" (Gold 1969). The main cause of bias is then the researcher's lack of ability to balance her self-expression and integrity with her information-gathering role. Threats to one role will impair the other role. For example, a bigotted informant who threatens the researcher's sense of integrity is likely to frustrate her self-expression.

Success in role-taking and role-playing is therefore thought to be dependent on the researcher's professional competence in balancing these two roles. And if the two roles are balanced successfully, unbiased data collection is likely to be the result (Gold 1969; Junker 1960; Scott 1961; Friedrich and Luedtke 1975; Moser and Kalton 1979).

According to the research literature, researchers can become more skilled in balancing their own roles and can train their informants to play their own role more successfully. This applies to verbal communication where "overrapport" and "underrapport" between researchers and informants constitute role imbalances between self and the research role. It also applies to the process of observation during research where "oversocialisation" and "undersocialisation" are failures of observation.

Having described the relevance of role theory to analyzing my own complex research role, it will be useful now to consider the possibility of bias of my data collection, using two possible sources of bias ("overrapport" and "oversocialisation") as the focus.

### **Overrapport**

Overrapport between researcher and informants might be a particular danger when the research role is combined with the role of practitioner and manager. The reason for this is that overrapport arises from "existing social ties", based on "sustained relationships" (Scott 1961).

Scott and Miller defined overrapport as a researcher-respondent relationship which is "too close", (Miller 1952; Scott 1961;), and thus tilts (or imbalances) the research role towards the self-role. This may result in the researcher's "concern with protecting and developing his good relationships with his subjects" (Scott 1961) at the expense of his information-gathering role.



Overrapport can also happen to informants. It may lead them to say "what the observer wants to hear" (Scott 1961), rather than what they believe to be "the truth". But whoever causes the role imbalance, the skill required from by researchers is to "re-balance" the research-role and self-role in favour of the research role by "retaining...[or re-gaining] sufficient elements of a stranger" (Gold 1969; Miller 1952).

It seemed that overrapport was a possible source of bias in this study. Typically of an "organic manager", relationships with my staff were very close and some of them had become friends over the years. However, my own experience of managing an organic type of service and Lickert's work on communication and relationships in organic types of organizations (Lickert 1967) made the research literature appear less plausible and rather narrow in outlook.

In my own experience, communication with employees does not necessarily become "distorted" because of "psychological closeness". On the contrary, often it becomes more open and honest because close relationships engender a greater sense of loyalty and integrity. My own assessment of people in organizations was confirmed by Lickert's (1967) work. He found that consultative and participative groups have accurate and open communication at the same time as "psychological closeness" between "superiors" and "subordinates".

The research literature also seemed to ignore that highly educated employees (such as professionals) tend to be skilled in social interaction. They are therefore able to play a range of roles in accordance with the demands of the situation. For example, a hospital consultant may have close ties of friendship with some of his junior staff, but behaviour in the hospital may remain formal and purely professional - and yet friendly. Although the possibility of overrapport was therefore kept in mind, it was not considered to be a likely source of bias in my study.

Distortions of "the truth" because of overrapport do nevertheless raise the issue of whether a researcher "can" know whether an informant is telling the truth. Dean, Eichhorn and Dean point out that "the question: how do you know if the informant is telling the truth ? ...assumes invariably some basic underlying attitude or opinion that a person is firmly committed to...his real belief...It implies that if we can just develop shrewd enough interviewing techniques, we can make [the informant] "spill the beans" and reveal what his basic attitude is" (Dean, Eichhorn and Dean 1969; p.106).

Stating their own point of view, the authors then argue that "the informant's statements represent merely the perception of the informant, filtered and modified by his cognitive and emotional reactions and reported through his personal verbal usages. Thus we acknowledge initially that we are getting merely the informant's picture of the world as he sees it"... "and only as he is willing to pass it onto us in this particular interview situation" (Dean, Eichhorn and Dean 1969; p.106).

Given the subjective nature of reality, it therefore seems that good research practice needs to be directed towards increasing the respondents' willingness to pass on information. This is likely to occur when research situations are produced which are conducive to creating the "willingness" in informants to convey, as accurately as possible, their picture of reality to researchers.

The details of what I did in my research to generate the physiotherapists' willingness to convey their picture of reality as accurately as possible will be discussed in the later section about "interviewing".

## **Oversocialisation**

As opposed to overrapport which affects the process of communication during data collection, oversocialisation

(\*) refers mainly to the researcher's powers of observation. The researcher begins to see the informant's world with the eyes of the informants rather than as a researcher (Scott 1961). But since talking and observing are processes which are linked in communication between human beings, the way in which a researcher observes during communication is likely to have a bearing on how the research interviews are conducted.

Oversocialisation means that the researcher has lost the research perspective (Gold 1969). And a particular danger of this role imbalance is that such researchers may not even notice that the research perspective has been lost during role-play. S(he) may thus continue to "go through the motions of observing" without any real observation taking place (Scott 1961).

Experienced researchers suggest various measures to regain role balance. Scott recommends "reviewing early field notes taken in a period when some of the group's ways seemed strange and inexplicable" (Scott 1961:p.569). Gold advocates the researcher leaving the field to "reclarify his self-conceptions and his role-relationship" ? (Gold 1969),

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(\*) In the research literature this is also labelled "overidentification" or "going native".

and to gain psychological distance through reflection. The art is to "regain sufficient elements of a stranger" (Gold 1969; Miller 1952).

Oversocialisation was a possible source of bias in my study because my close and sustained observation of the service may have dulled my power to observe the service in a fresh and unprejudiced observation way. The question was, what could be done about it ?

My problem was rooted in my managerial and professional roles: it was not possible for me to gain great distance - "to become a stranger". "Leaving the field" altogether was certainly not possible, but "reviewing" was a regular event because of tutorials with my academic supervisor whose critical questioning was constantly forcing me to see the subjects of my research as a "stranger".

Nevertheless my personal circumstances had given me a "natural" view as an "insider" and "outsider" to physiotherapy. During the course of my professional life I had left physiotherapy twice: first to study sociology and then social medicine (a post-graduate course for community physicians). Returning to physiotherapy after each period of study had created the skill to see physiotherapy as an outsider. However, having considered the matter carefully, there seemed to be no simple way of coping with oversocialisation.

These concerns and considerations of my complex research role were kept in mind when the data were collected and interpreted. The actual process of data collection in the local physiotherapy service will be described next.

## **The process of data collection - interviewing**

### **Introduction**

Two types of interviews were used during the different stages of the study. Semi-structured, in-depth interviews with individual physiotherapists were used to collect the pilot data on decision-making in physiotherapy, and for the major empirical investigation which explores knowledge, decision-making scope and organizational structure. Group interviews were used to aid the construction of the typologies.

Group interviews are discussed first because they were used first during the main period of research where they aided the construction of the typologies of knowledge and skills. These were then tested by semi-structured, in-depth interviews with individuals.

Although semi-structured, in-depth interviews with individuals were also used in the pilot study of decision-making in physiotherapy (reported in chapter two), the two episodes of data collection are reported here as one. Any differences or special problems encountered during the two episodes of data collection will be discussed in the section about the "process of interviewing".

## Timetable of work

<u>Mode of Data Collection</u>	<u>No. of Participants</u>	<u>Frequency</u>	<u>Average Duration</u>	<u>Dates</u>
Interviews with Individuals:				
Main interviews	21 (14) (1*)	2/3 intervs.	2/3 hrs (for 1 interv.)	1989/ 1990
Pilot interviews	6	2 intervs.	2 hrs (for 1 interv.)	1989
Group interviews	4	2 intervs.	2/3 hrs (for 1 interv.)	1989/ 1990

(1\*) The number of interviewees for the "technician" and "initital professional" periods was fourteen only. It was twenty-one for the "middle" period and "final" stage because seven interviewees had not been members of staff during these eralier periods.

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The total number of interview hours for the main interviews is therfore 104 hours; for the pilot interivews it is 24 hours: for the group interviews it is 20 hours.

The data about local physiotherapy practice in this "largely retrospective" study related to a four-year period from 1985/86 (the time of my appointment to district physiotherapist) to 1989/90 (the time of the interviews.

The interview data were supplemented by direct observation as a "participant observer" working in the organization and the profession, and by documentary evidence from the local service.

## Group Interviews

### The rationale for group interviews

There were four reasons for choosing group interviews, some of which were linked to the aims of the study; others were methodological.

One aim was to construct and test typologies of knowledge and skills which are "actually used" in physiotherapy practice. This meant that the typologies had to be firmly rooted in "knowledge-in-use" (Schon 1983), whilst at the same time reflecting professionalism concepts in the literature. A bridge was required between the rather abstract concepts of professionalism derived from the literature and the more concrete knowledge actually used in practice. The "bridging-knowledge" were the professionalism concepts, interpreted in practice.

This idea of "bridging", which was at the time of the group interviews "intuitively" based, has since then been described by Svensson (1991). His study of psychologists and architects showed that researchers may not be able to "detect" the concepts used by professionals because professionals often leave concepts "unexpressed". Although they use concepts, they do not refer to (scientific) concepts explicitly, but these "converted" concepts are into the thinking and language of the profession. This means that concepts may not appear as concepts.

What I attempted to do by conducting group interviews with physiotherapy practitioners was a parallel process. I was trying to add practice-based knowledge to abstract knowledge, which is more likely to emerge "in conversation", in order to convert the concepts of professionalism of the literature into more practice-based concepts.

The second reason for choosing to conduct group interviews also centered around adding practice-based knowledge to concept and is linked to the last point. But here the key focus was how a social situation could be produced to "pool" the wealth of ideas which practitioners tend to have about their work.

According to the research literature, group interviews become the method of choice when "being in a group" makes it easier for creative and exciting ideas to emerge. Our own experience of life, and research (Walker 1985), tells us that people can be stimulated both by their own interaction with other group members, and by watching and listening to other people. Thus, Walker advocates harnessing the "creativity of groups" for "generating new perspectives and insights".

I felt intuitively what Walker had found in his research: that the creativity of a group of bright colleagues who "always loved to talk about physiotherapy" would generate new and exciting ideas and insights about the typologies which I was trying to construct. And my dual role as researcher and manager provided me with a ready-made and ideal opportunity to create this situation.

I was also aware that the typologies needed to be built on a broad spectrum of professional experience and different types of physiotherapy specialisms, which I had not been able to capture in the literature about knowledge systems in physiotherapy. Breadth of specialisms appeared to be particularly important because it seems that in common with other professions, different physiotherapy specialisms attract different types of professionals and "people" who express different personal preferences and choices in their work.

For example, some physiotherapy specialisms (such as intensive care physiotherapy) attract knowledge-orientated physiotherapy who enjoy using technology, whereas other physiotherapy specialisms attract physiotherapists with different personalities, skills and likes. For example, in paediatric physiotherapy the ability to communicate skillfully and sensitively with very young mentally handicapped children and the ability to reassure their distressed parents are highly valued.

I felt that group interviews were useful for yet another "social" reason. A substantial part of the typologies of knowledge and expertise was about the "social activity" of organising the physiotherapy service, based on the physiotherapists' involvement in development planning. According to Hedges (1985), the social context of human activity is best explored by re-constructing the social context in the research setting, which a group interview offers.

Nevertheless, any group is composed of individuals, and given the complexity of the task in hand, the individual physiotherapists had to be selected with care. The physiotherapists needed to be experienced practitioners and to be able to reflect critically on their profession, their own practice and on the actions of their colleagues.

Thus, one of three physiotherapists selected for the group interview was my deputy who was a specialist in out-patient physiotherapy, a post-graduate clinical tutor and examiner, and also my deputy and first-line manager at the district general hospital. Possibly because of her role as a manager and her dedication to "good physiotherapy", she tended to be very critical of the work in the service, including my own management practice.

Another group member was a clinical specialist and first-line manager of children's spanning the entire health district. Her breadth of knowledge of clinical services, based on her district-wide clinical and managerial role, was complemented by her experience of having worked in another physiotherapy service which was considered to be a "model professional service". As a part-time student of the Open University she had also

written essays about managing physiotherapy, which had given her an opportunities to reflect critically about her own profession.

The third participant was chosen for her outstanding natural ability to reflect critically on physiotherapy practice rather than her breadth of experience as a clinician. This respondent was the senior 1 physiotherapist for the medical section and thus the most junior member of the group. Her contribution was also useful because she was a specialist in the medical section, which increased the range of physiotherapy specialisms of the interview group.

I was the fourth member of this exploratory group, the "natural" (hierarchical) leader of the service and group leader in my research role. My own experience as a clinician spanned all clinical specialisms in physiotherapy. I was also an experienced manager and senior member of the physiotherapy profession and, as such, a member of some national and regional health authority committees. This added to the breadth of experiences within the group and made it possible to make some judgment about the extent to which local physiotherapy practice might be typical of national practice.

### **The process of group interviewing: a problem of structure**

There is agreement in the literature on research methods that group interviews, which Easterby-Smith, Thorpe and Lowe (1991) describe as "loosely structured steered conversations", require considerable skills (Walker 1985; Easterby-Smith, Thorpe and Lowe 1991; Hedges 1985). To use Easterby-Smith's words, "group interviews are not for the novice".

One major source of difficulty is "hinted at" in the phrase "loosely structured" steered conversations. The problem which makes it difficult for the "novice" to handle this type of interview arises from the loose structure of group interviews. Although inexperienced interviewers are usually able to cope with structured interviews, they seem to lack the skills to "facilitate a comprehensive exchange of views" (Walker 1985) in the absence of structure. The skill in handling this complex situation lies in being "directional" without reference to a firm structure in order to extract the information, whilst at the same time supporting the spontaneity and flow of the conversation.

My group interviews with the physiotherapists had some initial structure because I had to explain that I wanted to discuss the variety of contemporary physiotherapy roles and the types of knowledge and skills associated with each role. I also explained that the purpose of this conversation was to help me think more clearly about my research project.



The participating physiotherapists were encouraged to take into account their experiences and knowledge of other physiotherapy services, in order to arrive at some "general view" of physiotherapy roles. To achieve this more general view they were particularly encouraged to "compare" their experience of working in the local service with earlier work in other physiotherapy services, and with information about other physiotherapy services from the "professional grapevine".

Apart from directing the conversation verbally, direction was also maintained throughout the group interviews by visual means. A flipchart which had been used in an earlier lecture about physiotherapy roles contained a diagrammatic model of four different physiotherapy roles, consisting of four concentric circles. The innermost circle was the technician role; the outer circle was "the most highly professionalized physiotherapy role and skills. "Post-it notes" were used to append any comments about the roles and its knowledge and skills to the concentric circles model.

### **The process of group interviewing: a problem of skills**

Group interviews demand a high level of skills from group interviewers, which Walker (1985) and Easterby-Smith, Thorpe and Lowe (1991) subdivide into two specific skills.

One skill is the "ability to establish rapport" with a group before discussions start ("initiator skills" in Easterby-Smith, Thorpe and Lowe's terminology). In this interview situation, initiating the conversation was not a problem, firstly, because of the relatively firm initial structure, and the flipchart which provided a continuing structure, around which communication could occur.

Secondly, and possibly more importantly, the situation was made easier by the fact that my interviewees were a "pre-existing group" in a participative/consultative organization, which aimed to encourage good communication and a sense of responsibility in all members of the organization (Lickert 1967). This meant that in an interview, as in all other situations when people were talking and negotiating, communication was likely to flow. Everybody contributed to the conversation because of a shared feeling of responsibility for the conversation.

And this is what actually happened during the group interviews. Communication was plentiful, friendly and open - and occasionally painful for me because of some criticisms from the staff.

Thirdly, initiating the conversation was also not a problem because "being professional" or "becoming professional" was a topic which the physiotherapists were always eager to discuss. It had been discussed many times before in the context of the education program.

However, "keeping a conversation going" is often more difficult than starting it. In the research literature this is acknowledged as the difficulty of "steering the conversation successfully with the research purpose in mind" ("facilitator skills") (Easterby-Smith, Thorpe and Lowe 1991). The particular skill singled out to deal with this problem are "executive skills", defined as the "ability to give...group members sufficient confidence" [in the group leader] to allow him or her to steer the conversation" (Easterby-Smith, Thorpe and Lowe 1991).

Although executive skills might be a problem for inexperienced researchers, they are an unlikely cause of difficulty for managers doing research. Given that most people in organizations work in teams, conducting meetings is something which managers do during most of their working days. I was an experienced senior manager who had chaired many local meetings. I was also experienced in chairing meetings beyond the local level and was therefore confident to be able to lead this group meeting with ease.

The problems described in the research literature were nevertheless kept in mind during the interviews, in particular as even highly skilled interviewers sometimes find it difficult to penetrate "the dynamics of pre-existing groups" (Lowe and Nilsson 1989).

Managers are also - to a degree - excluded from the their staff as a group by virtue of their position - whilst believing themselves to be insiders to the group of people they manage. The possibility that I may not have been able to penetrate aspects of the group dynamics were therefore kept in mind. However, I did not experience any problems during the group interviews.

### **The format of the local group interviews**

The group discussion was conducted in the following format. I told my physiotherapy colleagues that I wanted to have a conversation with them about how physiotherapists did their work: how they treated their patients; their total work role, including any responsibilities for organizing the service. I was particularly, interested in: "what sort of knowledge and skills they use in their work".

The purpose of the discussion was to identify the role of physiotherapists - and in particular their new professional role - and the knowledge and skills used in each role for my research project.

I reminded the physiotherapists that we had discussed this new professional role in the context of the education program. But now, the knowledge and skills used were of particular interest.

I told the group that, as discussed earlier, physiotherapists might function in four different modes, which I described to the group. These four modes were later labelled as: "technician role", "basic professional role", "semi-professional role" and "complex professional role".

Throughout the interview I guided the conversation by keeping the professional knowledge and skills categories in my mind.

### **The results of the group interviews**

The results of the group interviews are outlined in chapter eight. This chapter includes a discussion of how the group interviews contributed to the construction of the knowledge and skill system in physiotherapy (or typologies of knowledge and skills as they are sometimes referred to).

### **Interviews with individuals**

Semi-structured, in-depth interviews were chosen as the method of data collection for the main empirical study of the physiotherapy profession, which tested the knowledge and skills used in physiotherapy practice, decision-making and the organizational structure of the local physiotherapy service. The same type of interviews were used in the pilot about decision-making in the local physiotherapy service.

The interviews for the main study and the pilot are discussed here as one because of the similarities in issues, problems and subjects associated with data collection. The major difference between the two periods of data collection were my interviewing skills. By the time I did the main interviews I had become a more experienced interviewer. Any differences or special problems encountered during the different episodes of data collection will be discussed in the section about the "process of interviewing".

## **Rationale for semi-structured in-depth interviews with individuals**

The reason for choosing in-depth interviews sprang firstly from the complexity of the research aims outlined in the "summary of the study's aims" and the introduction to this section. To remind the reader here, the empirical part of the study of the physiotherapy profession was to test the knowledge and skills used in physiotherapy practice based on the typologies; to explore decision-making in physiotherapy, and the organizational structure associated with particular levels of knowledge and skills and decision-making.

Of the three empirical research aims, my decision to tackle this empirical part of the study by in-depth interviews was influenced most by my wish to explore knowledge and skills in physiotherapy. The interviewees faced the abstract and therefore rather difficult task of identifying the knowledge and skills which they and their colleagues used in their daily practice, rather than merely giving a factual account of their actions and of the service.

To identify the knowledge and skills used in one's daily work seemed rather difficult because experience tells us that even members of "mature" professions, such as the medical profession, are unlikely to be able to give a clear account of the knowledge and skills they used in their daily work. Imagine the extent to which your GP give a clear and concise account of the knowledge and skills involved in reaching the decision that your appendix needed to be removed !

We also know from the earlier discussions of literature about professional practice that professionals find it difficult to identify in clear conceptual ways the knowledge and skills used in their daily work (Svensson 1990).

The research literature advocates "loosely structured in-depth interviews with individuals" as the most fundamental form of obtaining "rich", "deep" and "live" data when the "reality" of the respondents is complex (Fineman and Mangham 1983). Another, and perhaps more precise way of expressing the same idea is to say that this method is useful "when a good deal of thought" is required to "explore the topic area", and to "clarify and explore the interviewees' responses" by further questioning (Easterby-Smith, Thorpe and Lowe 1991).

The key interviewing skill is "teasing out" what the respondents know - or what they believe they might not know because they cannot articulate it. This requires setting up the opportunity to probe deeply to uncover meaning, new clues and unexpected lines of inquiry

in order to get an inclusive account based on the personal experience of each respondent (Easterby-Smith, Thorpe and Lowe 1991).

To clarify an aspect of the research aims again here, the objective was not only to test the typologies which had been compiled on the basis of the literature about professional knowledge-base and the group interviews. An equally important aim was to allow additional data about professionalism to emerge - to make the data richer. And the best possible method of producing this were in-depth loosely structured interviews.

There was a second reason for choosing this method of data collection. As a manager I was aware of the different levels of my staff's sophistication. Choosing a method of data collection which allowed me to adjust the method of data collection in a flexible and fluid manner was therefore important.

According to the literature about research methods, one special technique helps to uncover meaning in very complex research situations. Easterby-Smith, Thorpe and Lowe recommend the exploration of complex research issues in a "step-by-step logic" i.e. by tracing the process of actions in which the actors are involved.

This meant exploring the use of knowledge and skills used in actual physiotherapy practice by asking physiotherapists about the sequence of their actions. For example, in the clinical domain, data about the knowledge and skills used for treating a stroke patient were gathered by asking the physiotherapists to describe the process of treatment tasks in a step-by-step fashion - asking what they actually do during treatment session.

This approach to gathering data about more conceptual, and thus more complex, matters might have led to two results. The respondents might, in the first instance, describe only what they do during a treatment session by outlining the tasks as a process. If this had happened, the knowledge and skills used during the treatment could be abstracted by me using my own clinical knowledge as a physiotherapist. (Incidentally, this demonstrates once again the advantages of practitioner research.)

An alternative, and preferred method rooted in the choice of in-depth methods, was to explore knowledge and skills by further questioning i.e. by asking the physiotherapists to reflect upon and to describe in detail the knowledge and skills which they had actually used whilst carrying out these tasks.

During the actual interviews approximately half of the respondents were able to give a very lucid account of the knowledge and skills used in physiotherapy practice, as the excerpts from the interviews will demonstrate. But where this was not possible because of their lack of experience and sophistication, knowledge and skills were explored through further questioning, as discussed earlier. This also meant that the degree of structure used in the interviews varied in accordance with the awareness of each individual respondent.

### **The process of interviewing: degree of structure**

Varying the degree of structure in accordance with the competence of interviewees has already highlighted the basic question of degree of structure which all interviewers have to address. We have also noted that the interview structures were determined by the empirical aims of the research project, which meant that interviewing and supplementary questioning were governed by the knowledge and skill typologies. However, a more concrete and more fundamental structure for interviewing was provided by a list of "key events" ((or "critical incidents" (Flanagan 1957; French 1989)), which were communicated to the respondents as "major events which had changed the physiotherapy service".

The reason for structuring the interviews by "key events" is linked to the my earlier reasons for employing a step-by-step logic to explore knowledge and skills. Although this had not been made very clear earlier, the reason for linking the exploration of knowledge and skills to the tasks which professionals carry out in their work was the "concreteness" of these tasks. The use of key events was yet another attempt to make the interviewees focus on concrete events - on the basis of which more abstract and more complex issues could be explored.

The wish to steer interviewing to a concrete level was linked to the physiotherapists' "practical" orientation. Physiotherapists pride themselves on being "practical sort of people" and my assumption was therefore that they might not be skilled in reporting more abstract, conceptual matters. It seemed therefore a good strategy to focus their minds on concrete issues and to explore more complex issues on the basis of concrete events (a strategy which had been discussed earlier in this section).

And finally, given the practical orientation of the profession, reflecting before the interviews in concrete terms also seemed to offer the greatest opportunity for new and unforeseen issues to emerge. One good example of a new issue emerging was "professional confidence" (a skill). All of the interviewees thought that they had become more confident as their opportunities for post-graduate education (a critical incident) had increased.

To ascertain a point of departure for the local development of professionalism the respondents were also asked to think about, "what the service had been like at the time of my appointment in 1985" before the actual interviews. I assumed that this would make it possible to test typology A which expresses the "technician mode" in physiotherapy.

Given that the study was retrospective, I also felt that concrete events (or service changes) would serve as clear reminder of the changes which had occurred during this relatively long four-year period about which data were being gathered.

The critical incident method is of course a well-tried research method in retrospective type of studies i.e. when it is necessary for respondents to track back to particular instances in their working lives (Easterby-Smith, Thorpe and Lowe). Flanagan (1957) used critical incidents, (defined as "observable human activity" that is "sufficiently complete in itself...") to "tease out information which might [otherwise] not be readily expressed" (Easterby-Smith, Thorpe and Lowe 1991).

But like many other research methods the critical incident technique has its problems, one of them being the "natural tendency of individuals to use hindsight in rationalizing the past" (Easterby-Smith, Thorpe and Lowe 1991). This appears to ignore the fact that human beings seem to be quite capable of censoring their thoughts before articulation in the same way as they "rationalize the past".

This issue has been discussed earlier in this chapter under the heading "Telling the truth" where it had been asserted that manager/researchers of organic type of organizations are less likely to obtain data tinged by "rationalizing" in comparison with those who research and manage mechanistic type of organizations. Because this physiotherapy service had shown fairly clear organic features in the decision-making pilot, "rationalizing" was not considered to be a particular problem during data collection. Nevertheless, the problem of "rationalizing" was kept in mind.

The more likely problem of the use of the critical incident technique was possibly "recall" (Easterby-Smith, Thorpe and Lowe 1991), which means remembering all or most of the events which occurred, and also remembering them with some degree of accuracy. Given the measures which had been taken to assist memory through careful structuring, this was however not anticipated to be a major problem in this study; nor did it turn out to be one.

Another factor which assisted the process of getting an accurate picture was the unit of analysis of this empirical part of the research project: the physiotherapy service as a whole organization. This meant that all data obtained from individuals were assessed with the organization as a whole in mind. Any major discrepancies in individual reports would have been explored through additional interviews.

Secondly also, considering that I had been party to most of all of these changes, it was also plausible to assume that the respondents would aim for accuracy in their reports.

Since these criticisms may have "some" substance, the interview data were supplemented wherever possible with evidence from documentary sources.



## CHAPTER FIVE

### EXPLORING THE KNOWLEDGE SYSTEMS OF PROFESSIONS

Knowledge and the professions.

Summary, discussion and insights - the knowledge and skill system of professions.

#### **Knowledge and the professions**

In many definitions of "profession" knowledge plays a part. For example, in Kocka's definition of profession "competence" and "practice" (the application of knowledge) of a particular type: knowledge and expertise based on "specialized, systematic and scholarly training", are aspects of profession.

High levels of knowledge (high complexity in axiomatic theory) had also been linked to professionalism by Hage and Aiken (1969). Complexity is high when high numbers of occupational specialisms ("extensity") are present in an organisation. This provides breadth of knowledge. Complexity is also high when the "intensity of knowledge" is high. Intensity is depth of knowledge (or specialism), which is specifically linked to professionalism in Hage and Aiken's definition of organizational complexity (1969).

The presence of high levels of knowledge and skills in the professional setting had been explained by Hage and Aiken (1969) by another essential trait of professions: the "service ideal" which "impels men to seek new knowledge continually in order to serve the clients' interest more adequately...Professionalism implies an insatiable appetite for knowledge and this acquisition of knowledge leads to the recognition of how little we know...It inspires greater learning. In this sense knowledge is by definition self-generating."

(Hage and Aiken 1969; p.33)

Following the SCASS reviews of the study of professions, Torstendahl confirmed the link between working as a professional and some kind of special knowledge - amidst doubts about the altruistic service ideal as the motivating force. He believes that professionals use a particular knowledge system to solve their clients' problems, but their special knowledge is also "social capital": professionals use their knowledge to further the political interests of professions. Torstendahl states that,

"In any definition of professions knowledge systems will play an important role. The theory of professionalism has to do, in one way or another, with how knowledge (and/or skill) is used by its owners as social capital and not only for purposes connected with the immediate problem-solving to which the system itself may refer"

(Torstendahl 1990; p.2)

The last part of the excerpt ties in with Collins' point of view that the primary purpose of developing professional knowledge to a sophisticated level may not be to serve clients' interests. Professional knowledge may be primarily designed to enhance the professions' own prestige and power (Collins 1990). The only difference between Torstendahl and Collins is the relative emphasis placed on knowledge as ideology, and knowledge as a tool to serve clients' interests.

It is however conceivable that professions develop and use their own knowledge for both reasons simultaneously: to serve clients and to promote power and interest. It is also possible that the development of knowledge primarily motivated by self-interest may also be used to serve clients' interests, and vice versa.

Whatever the motives of professionals, it appears to be the view shared by those who participated in the SCASS reviews that "there are groups based on a shared problem-solving knowledge which have acted as groups in different social settings in European and American history" (Burrage and Torstendahl 1990). Knowledge - and special type of knowledge systems - appear an essential characteristic of professions.

This leaves the question as to the particular type of knowledge system upon which claims to professional expertise are based so far unanswered. All work requires the use of some knowledge, and the question is therefore what is special about the knowledge which professionals use.

The message projected in the policy documents of the Chartered Society of Physiotherapy (CSP) was that professionalism in physiotherapy needed to be based on a special kind of knowledge, which then alters practice. This is set out in the New Curriculum of Study 1984 as..."a rigorous academic, scientific...approach to the acquisition and application of...knowledge and skills". The essential skills required for the new professional practice are the "ability to apply an investigative approach..."

(CSP 1984)

The CSP's statement contains ideas of professionalism used in Kocka's definition of profession. Kocka's description of professional knowledge is a system based on "competence" and "practice", which is based on "specialised, systematic and scholarly training".

The knowledge used by professionals may be "complex" and "specialised". It may also be "scientific" and based on "systematic and scholarly training".

The terms "scientific", "systematic" and "scholarly" contain the idea of theory, which Millerson had listed as a trait of professions: the "application of principles to concrete professional practice; skills based on theoretical knowledge; foresight based on theory; theory based on understanding" (Millerson 1964; p.5).

The idea of "applying principles" to "concrete professional practice" has been developed further since Millerson's research. The application of knowledge has become a key principle. According to Torstendahl (1990) "professions are centered on typical problem-solving systems of knowledge and/or skill". Moreover, professionals use their knowledge systems to "immediately" (directly) solve the problems presented to them by their clients. Hence, their knowledge systems "refer immediately to...(its) problem-solving use". This means that the "problem-solving capacity" inherent in professional knowledge systems is an important characteristic of knowledge systems. Professionals are not interested in producing knowledge for the sake of knowledge. They invent the kind of knowledge which can solve practical problems.

Given this firm and immediate link between knowledge and practical problem-solving, it does not seem sufficiently precise to define professions as "groups based on a shared problem-solving knowledge" (Torstendahl 1990). A more useful and precise phrase might be "group based on a shared problem-solving knowledge and skills".

Since each profession solves problems in particular areas of society only, its knowledge system relates to that particular area. This becomes a profession's domain of exclusive knowledge. And because this exclusive knowledge is applied to solve problems, knowledge becomes practice. For example, the domain of the medical profession are "bodily problems". The profession has exclusive "jurisdiction" (Abbot 1988) in these areas and has developed a body of knowledge to deal with these problems.

The domain of the physiotherapy profession are problems of "function, mobility" and of "pain" - and these problems are solved in a distinctive way: "by natural means" (CSP

1984). However, unlike the medical profession, physiotherapy has not yet achieved exclusive jurisdiction over its domain of exclusive knowledge and skills.

The literature about professional knowledge systems also showed that the problems which are solved by professionals are posed within a "conceptual framework" (Torstendahl 1990). If we translate "conceptual framework" into the language of trait theory this means "theory", or "the application of principle to professional practice (Leigh 1950: Moore 1970). So, Millerson (1964), who put "theory" at the centre of his definition of profession, stated that "a profession involves a skill based on theoretical knowledge - "the specialised skills of professionals" [are] "premised on an underlying theory" Gross and Osterman (1972) share this view.

Millerson underpinned the special importance of theory by also defining profession as the "intellectual, practical technique"... which "depends on a substantial theoretical foundation..." - a view shared by Moore (1970) and Goode (1969) who used the term "substantial corpus of theoretical knowledge".

The importance of theory to the professional knowledge system was given even more weight by Schon (1983) who found that professionals do not confine themselves to the use of one theory only. They use "competing theories"...[to] "look at things in several ways at".

The existence of theory and the ability to use theory flexibly and skillfully in professional practice seems therefore essential to how professionals work. Indeed, Moore used the criterion of theory to distinguish profession from non-profession ("avocations" in Moore's terminology). Whereas "profession involves the application of general principles to specific problems", avocations are "based upon customary activities"... "modified by trial and error of individual practice" (Moore 1970). Similarly, Glazer (1974) used theory to distinguish the theory-based - and thus "learned" - "major" - professions from the "near-major" and "minor" and professions.

This takes us to the point where it is possible to distinguish professions from non-professions by virtue of the existence of theory. But why do professions need to use theory ? And how do they use it ?

Svensson (1990) defined the need for theory in the work of professionals in terms of the need to "limit the need for information"... which "facilitates decisions as to action" (Svensson 1990). Theory "supplies concepts, classifications, models of thought,

connections...and criteria of relevance" (Svensson 1990), which enables professionals to narrow the problem (in the same way as I was trying to limit my research problem through the use of concepts). The particular "searchlight" used by professionals - which is based on a particular, exclusive theory - ignores any information which does not fit into the conceptual framework of the profession. This process therefore defines (( or "poses" the problem (Schon 1983)) and thus facilitates decisions as to action.

Nevertheless, Svensson (1990) discovered in his research that theories are more often than not "left unexpressed". Theories remain in the background to professional practice. A possible reason might be that professionals are not evaluated on their theories, but on their problem-solving skills.

Although these theories are kept in the background in professional practice (Svensson 1990), the science-component of theories has a high profile in professional knowledge-systems. Professions often claim to be "scientific", as the excerpt from the CSP's curriculum of study shows. From 1984 onwards physiotherapy training was to be based on "a scientific...approach to the acquisition and application of knowledge and skills" (CSP 1984).

Nevertheless, Elzinga (1990) produced some evidence for the ideological use of science. She found two ways in which professionals use knowledge to promote the interests of the profession. Science is used "to set up a demarcation vis-a-vis an earlier phase when this knowledge was largely tacit, non-formalised and transmitted by apprenticeships" (Elzinga 1990; p.151). It is also used "to distinguish an occupation from its neighbours in the same area" (Elzinga 1990). Science is used to establish professions' domain of exclusive knowledge and practice.

On the other hand, much of the literature confirmed science as a prototype of professional knowledge and "real" component of the professionals knowledge system (for example Schon 1983; Svensson 1990; Elzinga 1990). And the professions' strategy for achieving this "scientification" of knowledge has been to link the profession with production of Masters and Ph.D. students, professorial appointments and other research positions...in "their area" (Elzinga 1990).

This move enables professional groups to look to academic research for their theoretical and scientific core in order to validate their knowledge, and to obtain official recognition through degree programs. Elzinga considers this move a "sign of the coming of age of a profession" when it can point to the beginning of academic programs in "their area".

However, the research literature also supports the view that the scientific theories inform professional practice. "Professionals apply ...more or less science based generalizations and assertions" to practical problems (Svensson 1990), for which Schein (1973) provided detailed evidence. Schein distinguished between three hierarchically-linked scientific components which are present in professional knowledge systems.

The most basic and also the most general level of theory which may inform professional practice is "an underlying discipline or basic science upon which practice rests or from which it is developed". The second level is "an applied science or engineering component from which many day-to-day diagnostic procedures and problem-solutions are derived". At the highest level in this three-tier hierarchy of scientific knowledge is "a skills and attitude component that concerns the actual performance of services to clients, using the basic and applied knowledge" (Schein 1973; p.43).

Schein explains the link between the three layers by saying that the "application of basic science yields applied science"; applied science in turn yields diagnostic and problem-solving techniques", which are "applied in turn to the actual delivery of services". Applied science can therefore be said to "rest on the foundation of basic science, and practice (skill) rests directly on applied science, and ultimately on the foundation of basic science.

This also means that the "applied level" of the hierarchy, which yields the "diagnostic and problem-solving techniques of the profession" is the domain of exclusive knowledge of a profession. Exclusivity" is seen as another benchmark of professionalism.

Although Schein (1973) purports to describe the reality of how scientific theories and principles are used in professional practice, others have investigated how this particular idea has been used by the professions to promote their own interests.

So, Schon (1983) makes a link between types of knowledge and the status of a profession. "The more general the knowledge, the higher the status of the producer". Thus, when "aspiring professions" consider the problem of rising to full professional status, they often ask themselves whether their knowledge base has the appropriate properties and whether the proper knowledge base is applied in everyday practice. If the knowledge base is considered to be insufficiently general, the profession may advocate systematic research to construct theory as a way of filling this "central gap".

Physiotherapy is a good example of a profession addressing this "central gap" in its knowledge base. The strategy adopted by the profession during the mid-eighties was to establish a research paradigm and research methods which were considered to be appropriate for the type of problems solved by physiotherapists (predominantly case studies). The profession felt that it should not continue with adaptations of the research methods used by the medical profession (clinical trials), which also produced a "demarcation" (Elzinga 1990) between medicine and physiotherapy.

More recently has Svensson (1990) questioned the extent of Schon's and Schein's association between the use of scientific theory and professionalism. Svensson believes the actual use of scientific knowledge to be "more limited" and less typical of professional practice than some researchers (like Schon and Schein) - and the professions themselves - would have us believe. Scientific principles may not be "directly" or "explicitly" stated by professionals because many theories are "translations of theoretical concepts and explanations", such as "the Freudian orientation" in psychology. Other theories are perceived by professionals as "common sense ideas". Science seems to have a relatively low profile in professional knowledge systems.

Nevertheless, Svensson did observe the use of three scientific principles and methods in his research of psychologists. One was the use of "formalized tests and testing methods" which are used for defining "what information is worth obtaining" and "how [phenomena] can be interpreted according to some particular theory" (p.56). This seems to link the "skill" levels and the "applied" level in Schein's hierarchical model of professional knowledge and skills.

Svensson also found that "hypotheses, models and explanations derived from theory" were used in professional practice, which links the "basic" and "skill" levels of Schein's model. The third use of scientific theories is in the guise of "theoretical orientations" and "commonsense ideas" (such as "the Freudian orientation").

Although the evidence for and against the extent of the actual use of science leaves us with a sense of ambiguity, Svensson's investigations were useful from a different point of view. If science is not used explicitly and directly in professional practice, researchers may have problems in discovering this knowledge in professional practice.

This might be a problem which particularly affects academic researchers who are outsiders to the professional communities they are researching. Practitioner researchers are likely to be able to cope better with this problem, in particular if they are also members of the

profession they are researching. And although this added to my confidence that I would therefore be able to extract this seemingly difficult information, the idea was nevertheless kept in mind during the interviews with the physiotherapists at the stage of interpretation.

The idea of professional practice being grounded in systematic knowledge of which scientific knowledge is the prototype contains however a problem because the professions also claim that the problems solved by them are "unique" in the sense that each case is different in some respects from any other case. The problem is thus the difficulty of subsuming unique phenomena within a scientific and theoretical framework which is built of general principles.

The dilemma requires in the first instance a definition of what a unique case is. Schon's (1983) own explanation of a unique case is: "a case that is not in the [medical] books". According to this definition, a totally new disease is therefore a unique case because it has not been defined before. For example, the physician therefore cannot "apply standard techniques" to a totally unique case, as opposed to a "common" case of measles. In the case of measles the physician recognizes the case (of measles) by mapping it onto a system of techniques for diagnosis, treatment and prognosis as described earlier in Schein's hierarchy of scientific professional knowledge. But a totally unique case which remains unique (such as a totally new disease), "falls outside the categories of applied theory". The "ends" (the problem itself) are not clear; there is yet no problem to solve. The problem has to be "set" (defined) before it can be solved.

Nevertheless, it should be noted that not all cases solved by professionals are as unique as the case which has just been described. Professionals refer to "routine cases" in their work, which indicates a continuum of types of cases ranging from those which are truly unique to cases with more general and familiar features.

For example, in the field of surgery, hernia repairs or appendicectomies are considered to be routine surgical cases as long as these cases are "straightforward", that is, without any complications (special or unique features). If complications developed, this might turn the routine case into a unique case, which can not be subsumed within the framework of general treatment principles in surgery.

Moore copes with this problem by saying that there are nevertheless "sufficient uniformities in problems and in devices for solving them", [because professionals] apply "very general principles...to concrete problems..." If every "problem were in all respects unique,



solutions would be at best accidental, and therefore have nothing to do with expert knowledge" (Moore 1979; p.56).

In contrast, Schon (1983) and Svensson (1990) introduce the idea of a different kind of thinking ("non-technical rationality") which "prepares unique problems for problem-solving in the conventional way, that is, within a scientific and theoretical framework". Schon suggests the "non-technical" process of "naming" and "framing" for coping with the problem of "uniqueness" in professional practice to "make sense" of the problem in the first instance by converting "the problematic" into "a problem" which can be solved.

"Making sense" is described by Schon as "naming" ("selecting what we will treat as "things" of the situation"), which sets the "boundaries of our attention". This process is followed by "framing", which is the process of "imposing a coherence which allows us to say what is wrong". Only then can the professional solve the problem through the application of existing theory or technique, that is, by mapping categories onto features of the practice situation.

Schon also suggests that this process of making sense of the practice situation continues to be used ongoingly during all stages of problem-solving which makes professional thinking and actions ongoingly analytical ("experimental"). In Schon's well-known book about "how professionals think in action" it is called "thinking on your feet" or "know-how-in-action". Elsewhere in the literature, the same process of reflective thinking has been labelled "double-loop learning" ("naming" in Schon's terminology) because questioning the "relevance of one's operating norms" involves taking a "double look" at the situation (Morgan 1986).

However, the extent to which this sophisticated and highly analytical type of thinking is used in practice depends on whether professionals solve problems in the "high, hard ground" or in the "swampy lowlands" of professional practice (Schon's terms). The "high, hard ground" is where research-based theory is applied "rigorously" (heart transplant surgery !); the "swampy lowlands" are the domain of problems of the "greatest human relevance" (geriatrics !).

Schon suggests that this "dilemma of rigour and relevance" creates "tensions" within professions and professionals - a statement with which few health care workers would probably disagree. Nevertheless, the idea of a dilemma view seems to have been superseded by the idea that these two major types of thinking are "compatible and complementary".

Thus, Svensson (1990) identified types of knowledge used in professional practice of which two are based on technical rationality. "Theoretical, asserted knowledge" is the term used by Svensson for knowledge based on technical rationality, of which there are two: "skills and knowledge" (discussed earlier), and "rules and regulations".

The other three types of knowledge are "alternative" ("non-technical") knowledge. The first is "tacit, reflective knowledge" (as described in Schon's work). The other two are "experience" and "conversation" which are "more or less formalised talks with clients, colleagues and other personnel" (Svensson 1990). Of those "non-technical" knowledge categories tacit, reflective knowledge has already been discussed. "Experience" also seemed to be relevant and interesting to research of physiotherapy. And conversation" (communication) became only relevant when the interview data were interpreted.

"Experience" has a very high profile in the language and practice of professionals. Using "experience" in professional practice means "referring to concretely experienced examples" and "drawing parallels between cases" - between old and new cases (Svensson 1990). This process of comparing present cases with past cases is used at the stage of diagnosing the problem, as well as at the problem-solving stage. And the reason why professionals use and value experience is likely to have its roots in the considerable complexity of the professional knowledge and the difficulties of applying this complex knowledge.

The service ideal of professionals may also play a role in the high value which professionals attach to experience. Professionals pride themselves in giving the "best service", which according to Hage and Aiken (1969), drives professional knowledge to a high level of sophistication. A strategy for achieving this high quality of service is to provide practitioners with opportunities for repeating the application of knowledge to concrete cases. Repeated practice is assumed to lead to mastery and thus quality. Practitioners are expected to become experienced through repetition to become competent through repetition.

This idea manifests itself in the system of "apprenticeships" or period of "probation" operated by the professions in which newly qualified practitioners undertake work supervised by an experienced practitioner for a prescribed period. For example, newly qualified physiotherapists practise for two or three years under the guidance of senior physiotherapist before becoming a "fully qualified practitioners" (a senior physiotherapist).

The process of using experience is closely linked to the concept of "professional judgment". Experience and good professional judgment are the qualities which distinguish experienced senior members of professions from those who are less experienced because good professional judgment can only be acquired with experience. It can only be accomplished through the repeated application of complex knowledge in concrete problem-solving situations.

However, what has been said so far about experience was taken from the rhetoric and practice of the professionals themselves. In spite of the high profile of "experience" and "professional judgment" in the language and practice of the professionals themselves, the literature about professional knowledge systems seemed relatively thin. "Experience" had not been mentioned in early writings about the professions (Millerson 1964) but has now become an aspect of professional knowledge systems (for example in Svensson's work).

In contrast, "professional judgment" had been discussed in the early discussions of professions (Leigh 1950; Millerson 1965) but the modern literature on the professions does not appear to refer to judgment as a key aspect of professional knowledge or practice. For example Schon's (1983) influential work about "how professionals think in action" does not explicitly refer to professional judgment. Nor does the literature following the SCASS reviews on the study of the professions.

### **Summary, discussion and insights**

Having researched the literature on knowledge and the professions extensively, there seemed to be some support now for Torstendahl's suggestion that professions are groups "based on a shared problem-solving knowledge". However, because knowledge and skills are closely intertwined - yet distinct - in professional practice, the phrase used in the literature "knowledge system of professions" was expanded to include "skills". Based on the literature, the special features of the "knowledge and skill-system" of professions appeared to be the following, in spite of the many controversies surrounding the nature of the professional knowledge base.

### **The knowledge and skill system of professions**

- Professional knowledge and skill systems are based on theory.
- The theoretical content of professional knowledge-systems is "substantive".
- Professionals use competing theories in their work.

- The theories used in professions are modified by insights gained from professional practice; practice is modified in the light of changed theories.
- The theories used by professionals tend to be scientific theories.
- Professionals convert basic science into applied science and ultimately into skills, which are used for "immediate" problem-solving.
- Although professions draw on other scientific disciplines at the basic-science level, the applied-science level and skill-level are the exclusive domain of knowledge of a profession.
- Knowledge is used for "immediate" problem-solving. It is based on a "practice-orientated" philosophy.
- The "practice-orientation" of professionals leads professionals to value knowledge which has an inherent practical problem-solving ability to value such knowledge highly.
- The professionalism of organizations has two aspects: "occupational extensity" (breadth of knowledge) and "intensity" (specialism or depth of knowledge). These may also be criteria of individual professionals working in organizations. Highly professionalized employees are likely to work as specialist (based on the possession of specialist knowledge), whilst at the same time being the incumbents of breadth of knowledge. They may be knowledgeable about other specialisms whose work impinges on, or is linked to the problems solved by their own specialism.
- Apart from using the "technical rationality" inherent in the scientific and theoretical framework described in this chapter, professionals also use "non-technical rationality" (reflective thinking) to prepare complex and unique professional problems for problem-solving by scientific and theoretical means.
- Professionals rely on the use of "experience" and "professional judgment" in their quest to produce high quality of work. The evidence about the use of experience and professional judgement in professional practice was relatively poor, in spite of the high profile of the two concepts in the rhetoric of professionals.

## CHAPTER SIX

### PHYSIOTHERAPY AS A PROFESSION: A DOCUMENTARY ANALYSIS

The knowledge and skill system of physiotherapy.

Summary, discussion and insights.

The next stage was to analyse the extent to which the knowledge-base in physiotherapy was professional. To achieve this, the appropriate policy documents and the writings of those who had reflected on professionalism in physiotherapy were examined. This analysis of the literature about physiotherapy was preliminary to the empirical task of testing the extent to which professional knowledge was actually used in the local physiotherapy practice.

Having extracted the categories of professional knowledge and skill systems from the literature about the professions, there was now a question whether these categories needed to be "adjusted" to physiotherapy, in readiness for data collection about physiotherapy practice. This seemed important because one of the difficulties that had been highlighted in the literature about professional knowledge systems was the problem of extracting these categories in the daily context of professional life. Svensson's research (1990) had shown that professionals frequently "leave theories unexpressed" and "in the background of professional practice". Some care needed to be taken in the process of making this discovery possible.

My reason for choosing to test the knowledge system first of all in the literature about physiotherapy was also my wish to base my assessment on sources which contained an overview of the entire profession. This overview was needed to put local practice into the context of the whole profession.

The earlier discussions of the policies governing contemporary physiotherapy practice had already shown that the physiotherapy profession had, (typically of a professionalizing profession), reached a stage where it was asking itself whether its knowledge base had the prerequisite properties for becoming a profession. This is why a "new" curriculum of study (the qualifying training course for physiotherapists) had been constructed. But although this baseline had been set, there was as yet no unified post-registration education program.

The first task was thus to choose key policy statements which set out the knowledge base for physiotherapy and to compare those with the categories derived from the literature about professional knowledge systems.

The key document seemed to be the new curriculum of study 1984 which sets out the type of training which qualifies physiotherapists as practitioners of physiotherapy. This is the knowledge system which equips practitioners with the basic and most essential skills to do their work. It is this which allows them to practise as "chartered" and thus properly qualified physiotherapy professionals. The document represents the collective wisdom of the senior members of the physiotherapy profession - of those who lead education, and of those who engage in clinical practice and manage physiotherapy services at the grassroot level. The professional experience of all of these senior professionals is harnessed in the CSP's education committee which designed the 1984 curriculum of study.

(It could of course be argued that post-registration training may have been more appropriate since it reflects the skills required in actual professional practice. However, a unified post-graduate training system had, as yet, not been developed).

The new curriculum of study showed many, but not all, essential characteristics of professional knowledge systems. One essential feature of professionalism is stated in the document's "aim" :

"The aim of physiotherapy pre-registration education is to produce safe, effective therapists who have adopted a rigorous academic, scientific and ethical approach to the acquisition and application of their knowledge and skills for the benefit of their patients..."

(CSP 1984; p.1)

The fundamental approach of the new curriculum is outlined here as "rigorous academic" and "scientific". Scientific knowledge is one of the fundamental features of professionalism (Schein 1973; Schon 1983; Svensson 1990; Elzinga 1990), and if the claim to scientific principles can be backed by practical problem-solving skills, the evidence for physiotherapy being a profession would be fairly substantial.

Torstendahl (1990) had discussed the link between theory and practice by saying that professionals are "centered on typical problem-solving systems of knowledge and skills". Professions produce knowledge for the immediate application to practical problem-solving - not for the sake of producing knowledge.

Typically, the document links knowledge to skills, some of which are also outlined in the statement of "aims":

"to demonstrate...an ability to apply an investigative approach to academic and clinical subjects; analyse and assess the physical, psycho-social and environmental state of the patient from a physiotherapeutic point of view; synthesise knowledge and assessment of the patient to identify treatment objectives... evaluate the effectiveness of both assessment and therapeutic program".

(CSP 1984; p.2)

Typically also of professions, the curriculum shows a hierarchy of knowledge ranging from "basic" to "applied" science and skills, where basic science occupies the most fundamental level in the hierarchy (Schein 1973).

First, the basic science level in physiotherapy. The "foundation studies section" of the new curriculum outlines the basic-science level for physiotherapy as "anatomy, physiology, concepts of health and disease; biomechanics and fluid dynamics; principles of thermal, electrical and ultrasonic procedures" (CSP 1984; p.5).

The basic sciences listed in the document are the knowledge of disciplines in their own right, on which all professions "directly draw" (Chapman 1977) to develop their exclusive knowledge base, which is the "applied" level in Schein's hierarchy of professional knowledge. For example, physiology is a discipline in its own right, not a "specialist branch of the medical profession". The medical profession draws on the principles of physiology to develop medical procedures.

The CSP's curriculum of study then goes on to outline physiotherapy skills which represent Schein's second layer of the hierarchy of knowledge: "applied science". It is the layer from which the diagnostic procedures and problem-solving methods of a profession are drawn (Schein 1973), which also makes it the area of knowledge which is exclusive to the profession.

First, the body of knowledge which is exclusive to physiotherapy. This is hinted at in the curriculum by referring to ability "to analyse and assess the physical, psycho-social and environmental state of the patient from a physiotherapeutic point of view".

"Physiotherapeutic point of view" is the key phrase here. To analyse from a "physiotherapeutic point of view" requires a "physiotherapeutic kind of knowledge and skills" - not medical knowledge and skills.

The idea of exclusive knowledge residing in the applied-science level is continued in the "movement section" of the curriculum, where "applied science in physiotherapy" is described.

Movement and how to restore movement to normal function through rehabilitation is the essence of physiotherapy work and therefore the key area of knowledge and skills. Hence, the aim of the curriculum's "movement section" is said to be: "to develop an understanding and appreciation of normal movement so as to provide a foundation for the recognition and analysis of abnormal movement" (CSP 1984, p.9).

The aim is then linked to theory in the "objectives section" where the language of theory and principle is continued: "...to explain the theory underlying movement skills including the indications and contra-indications for their use" (CSP 1984, p.9).

Theory and skills based on underlying theory are, as we had seen earlier, a crucial characteristic of professions (Millerson 1964; Gross and Osterman 1972), and the function of theory is to provide the tools for observation, classification etc. Typically, the curriculum uses the phrase "to analyse and assess...the state of the patient..." (CSP 1984), thereby making some link between theory and practice.

The statement of aims contains a third aspect of professionalism. In: "to analyse and assess...the state of the patient..." the word "patient" is used in the singular, which underlines the notion of patients being "unique" cases, requiring unique forms of treatment.

However, in the curriculum's section "physiotherapy studies" (CSP 1984) the language of theory somehow peters out. Although the introduction to the section states, "this section of the curriculum is designed to apply the theories of the foundation course to the development of physiotherapeutic techniques" (CSP 1984; p.12), theories are replaced by concrete actions - not actions based on, and explicitly linked to theories.

This raised the suspicion that the physiotherapy profession, like all other professions, used the principles and theories of other disciplines, but may - as yet - not have a fully developed body of physiotherapy-specific theories.



This suspicion of the lack of a theoretical base exclusive to physiotherapy practice was confirmed by Krebs and Harris (1988), two American academics, of which one is a "physical therapist" (the American title for physiotherapist). Although their comments refer to the American scenario, which is considered to be more highly developed, their comments are useful because they show "what was missing". Perhaps more importantly also, the authors indicate what needs to be done to develop a theory of physiotherapy.

Krebs and Harris state that, "We cannot provide examples of general physical therapy theory, because we are not aware of any general theory of physical therapy that has been published...Any general theory of physical therapy would have to address a rather broad range of biological and behavioural theorems and be generally applicable to physical therapy in clinical practice, research, administration and education" (Krebs and Harris 1988, pp.60/61).

Krebs and Harris (1988) then propose a "conceptual model" for "physical therapy" (the American term for physiotherapy).

"Conceptual...models systematically interrelate current approaches, ideas and data to predict new or untried treatments. Noting the lack of specific treatment approaches for clients with head injury, Umphred developed a problem-oriented, conceptual model based on integrating research findings, theory of CNS (central nervous system) function and dysfunction, and treatment techniques for other neurological disabilities".

(Umphred 1983, p.60)

Krebs and Harris' notion of a theory which is exclusive to physiotherapy is a "general theory of physical therapy". It is a theory which encompasses "a rather broad range of biological and behavioural theorems" (basic science) [and is] "generally applicable to physical therapy clinical practice, research, administration and education" (applied science and skill level) (Krebs and Harris 1988; pp.60/61).

This lack of physiotherapy-specific theory had also been noted by the American Physical Therapy Association (APTA) when in 1986 physical therapists were encouraged to participate in the advancement of theory in physiotherapy. According to APTA's committee on research, "history teaches that a profession cannot hope to gain scientific credibility by clinging to data without theory" (Physical Therapy 66; pp.661-662).

No such call had come from the Society of Physiotherapy in Britain. This was not surprising because in my own experience as a member of the profession, physiotherapy in Britain was considered to be "less advanced" in comparison with physical therapy in the

U.S.A. and in Australia. Most importantly for the production of theory, Britain still largely lacks the academic structures enjoyed by the profession in the U.S.A. and Australia.

In both countries the academic set-up includes professorial appointments for physical therapy. They are the academic branches of professions which produce the theoretical knowledge-base for professional practice (Burrage 1990).

This is also possibly why my review of "Physiotherapy, Journal of the Chartered Society of Physiotherapy" did not confirm the existence of substantive theory in physiotherapy. Some articles did however portray an awareness of the need to develop such a theory.

So, Partridge (1982) (Research Officer for Physiotherapy Research at King's College, London) encouraged physiotherapists to develop their own model for research, rather than to use the "medical model" for clinical research in physiotherapy. Partridge pleads with physiotherapists "to abandon the myth of the medical model" in their research of physiotherapeutic problems. She also urges the profession "to develop its own research paradigm", in order to build its own body of theory.

Atkinson (principal of a physiotherapy school) called for "research-based work" in physiotherapy and "an attitude of enquiry and interest in research-based work"...[if physiotherapists] "are to call themselves experts" (Atkinson 1988). Although Atkinson links the necessity for research to expertise, research is not explicitly linked to the development of theory in physiotherapy.

Sim's article (1985) on the "professional profile" of physiotherapy included a paragraph on the "question of a theoretical body of knowledge" in physiotherapy. Like Krebs and Harris, Sim believes that physiotherapy has not yet developed its theoretical knowledge-base as the basis for professional practice.

In Sim's view (1985) the profession of physiotherapy "may acquire an in-depth knowledge of such fundamental areas of science as biomechanics, ergonomics and applied physiology"...through "postgraduate courses and masters' degrees" [which] "will produce a distinctly physiotherapeutic corpus of theoretical knowledge as a basis for professional practice" (Sim 1985; p.18). This development will in Sim's view be reinforced by "the increasing amount of research...into the clinical practice of physiotherapy" (Sim 1985; p.18). The body of theoretical knowledge exclusive to physiotherapy does not yet exist.

The question of the extent of theory-based physiotherapy practice was further examined by a brief survey of the literature of a physiotherapy specialism which is considered to be one of the most highly developed areas of physiotherapy: manipulation of the spine.

The literature showed some evidence of the language of theory being used. Physiotherapists who have specialized in spinal manipulation usually practise using three competing approaches: Maitland, McKenzie and Cyriax. This means that three competing conceptual frameworks have been developed.

We had seen earlier that professions use "competing theories" to analyse problems. To use Schon's words, "professionals do not confine themselves to the use of one theory, but use "competing theories"... "to look at things in several ways at once". The very existence of three competing theories ("approaches") means that the theoretical orientation in this specialist area of physiotherapy had become "substantial" (Moore 1970; Goode 1969), which had also been discussed as a benchmark of professional knowledge-systems.

A more recent article about one of these approaches to spinal manipulation) showed some theoretical content underlying the practice of manipulation. The article states that "the concept of using tests such as straight leg raise or prone knee bend to stress dura or what Maitland has termed pain sensitive structures within the vertebral canal is believed to be an oversimplification of the true anatomical and biomechanical facts" (Butler and Gifford 1989, pp. 622-623).

The authors then expand the concept of "pain sensitive structures" to embrace the nervous system as a whole in this paper. This is achieved by introducing the term "adverse mechanical tension of the nervous system" to explain "how pathology affects normal movement and biomechanics of the nervous system and its surrounding tissues." A concept from mechanics (adverse mechanical tension) is adapted to the human body ("adverse mechanical tension of the nervous system") (Butler and Gifford 1989, pp. 622-623). It is used to explain dysfunctions in "normal movement and the biomechanics of the nervous system and its surrounding tissues".

### **Summary, discussion and insights: the knowledge and skill system**

- Physiotherapy still lacks the substantive theory and exclusive body of theory underpinning fully professionalized practice. - However, members of the physiotherapy profession have recognised the need for such a development.

- The components of a "general theory of physical therapy" had been thought out in the USA.
- The survey produced some evidence of the use competing theoretical approaches in a physiotherapy specialism.
- Research had been identified as the vehicle for developing a general theory of physical therapy, and therefore also practice based on theory.
- There was evidence of the profession's awareness of the inappropriateness of research paradigms and methods used in the medical profession (clinical trials) for research of physiotherapeutic type of problems. This was considered an instance of "demarcation" - an attempt by the physiotherapy profession to distance itself from the medical profession.
- This strategy seemed to be based on a clear vision of a predominant research paradigm which is appropriate for research of physiotherapeutic problems (the case study method).
- The curriculum of study contained some limited evidence that the problems solved by physiotherapists were conceptualized as "unique".
- Other criteria of professional knowledge-systems were in evidence, such as the "immediate" link between theory and practice.
- All evidence about the professional-knowledge base of physiotherapy had an underlying "technical rationality".
- The literature about physiotherapy did not contain any categories based on "non-technical rationality". Because these categories are more closely linked to "practicing", it was possibly unlikely for these categories to have emerged from the literature which had been chosen. The absence of evidence for the use of non-technical rationality did not indicate therefore that physiotherapists did not use this type of knowledge.
- Since some of the categories within the framework of non-technical rationality appeared to be strongly linked to practice, it was expected that these categories would emerge in the interviews about physiotherapy practice.
- Although, on this evidence, the knowledge system of physiotherapy matches fairly closely the categories of the professional knowledge systems, it is perhaps the incompleteness of a general theory of physiotherapy which detracts most seriously from the knowledge system of physiotherapy being defined as professional.
- Depending on the view of what a profession is, this evidence might turn out to be particularly significant because some sociologists of the professions (Moore 1970, Glazer 1974) use the criterion of theory to distinguish professions from avocations.

- It was nevertheless not clear to what extent the knowledge systems of professions, which are "acknowledged" as professions, have in fact a "substantial theoretical foundation" (Moore 1970).

## CHAPTER SEVEN

### PHYSIOTHERAPY AS A PROFESSION: THE NATIONAL POLICY CONTEXT

#### Introduction.

The growth of autonomy in physiotherapy - the end of medical hegemony.

The foundation of the physiotherapy profession and era of medical patronage.

"Organization" - preparatory steps towards autonomy.

The Cope Report (1951) and the first challenges to medical patronage.

The Professions Supplementary to Medicine Act (1960) and increasing autonomy based on  
"organization" by the state.

"Watersheds in independence": the Tunbridge Report (1972) - the McMillan Report (1973)  
- NHS re-organization (1974).

Further steps towards "clinical" autonomy.

Full managerial and clinical independence through NHS re-organization (1982) - a new  
framework for decision-making.

New rules of professional conduct (1987).

Summary, discussion and insights.

#### Introduction

Having analyzed knowledge in physiotherapy from the perspective of professionalism, it was now necessary to return to the second key dimension of the study: decision-making. In chapter two, local decision-making "practice" was discussed from the perspective of Hage's axiomatic theory. Now, national policy, which is the context to local decision-making, is the focus. From the "newer" perspective of professionalism theory (discussed in chapter three), the national policy context to local decision-making is the "contingency" (Torstendahl 1990) - an aspect of the environment which impinges on the behaviour of professions. One type of contingency for physiotherapy as practiced in the NHS was the state's "economic rationality" (Alaszewski 1978) which, based on his analysis of the physiotherapy profession's relationship with the DHSS, had influenced knowledge (the profession's "properties") and its autonomy (its "strategies") over the years.

Analyzing the national policy context to local physiotherapy practice was now necessary for two main reasons. Firstly, my practical management problem, which had prompted this research project, was a question about how to locally implement national policy. National policy was clearly the context to what was done, and could be done, locally. It was an

expression of the expectations of the profession and the state (the DHSS), which also has legal force by via the CSP's rules of professional conduct and the law of the land.

Secondly, understanding the present state of autonomy in physiotherapy from the perspective of the interactionist (actor-based) framework seemed also "practically" useful knowledge for implementing professionalism locally. Take the idea of "knowledge of" (the professional knowledge system) and "knowledge about" (the procedures of the profession) as the two political "resources" which might be used to gain a profession's "goal" of "self-control". If, for example, one of the two kinds of resources could be shown to be a more powerful tool in reaching the profession's goals at the national level, it might also be used to gain greater autonomy in local "practice".

But thirdly, since one of the overall theoretical objectives of the study was an attempt to discern the "specific pattern" of physiotherapy as a profession, and since the contingency is part of the pattern of "what a profession is", its national policy context seemed an important aspect of the analysis.

This was particularly important because the largest employer of physiotherapists is the NHS (a state bureaucracy), which produces dual relationship to the state, and therefore also a potentially strong contingency. The state is the "regulator of professional life" and is at the same time "public employer" - the "ultimate user of professional services" (Burrage 1990).

### **The growth of autonomy in physiotherapy - the end of medical hegemony**

During the seventies the thrust towards greater autonomy in physiotherapy gathered momentum with two policy changes. HC(77)33 and HC(79)19 shifted clinical and managerial decision-making from the medical profession to physiotherapy. A third key change (the new curriculum of study 1984) aimed to revise the knowledge and skill system of the profession to make physiotherapy more professional (as discussed in chapter six).

The changes towards greater autonomy were underpinned by a strong craving for independence in the physiotherapy profession, to which Joyce Williams, Chairman of the CSP Council, gave voice in 1984. "Within the profession the model of a physiotherapist accepting orders from a doctor has been discarded" (CSP 1984). The blunt and direct language of her pronouncement conveys the strength of feeling and determination of physiotherapists to become independent professionals. It will become clear during the analysis of the struggle with the medical profession that the bluntness of her statement mirrors the hard and long struggle between the two professions.

Going back to the foundation of the physiotherapy profession, and ending this analysis with the picture of the present state of autonomy, will give us a number of - historical - snapshots of a "specific combination of properties" (Torstendahl 1990) of the profession's degree of professionalism. It will also show how the profession "persistently" used a particular resource - mainly "organization" (Burrage 1990) - to pursue its goal of self-control. The different patterns of interaction between the physiotherapy profession, the "encompassing" medical profession ((Jacques' concept (1978)) and the state may then give us some insights and guidance to how the profession might usefully negotiate its future in today's NHS.

### **The foundation of the physiotherapy profession and era of medical patronage**

The first snapshot then of physiotherapy goes back to the 1880s when Swedish masseuses (the founders of the profession) actively sought patronage from progressive members of the medical profession who employed them for "medical rubbing" (Wickstead 1948). Medical patronage was formalized when the Society of Trained Masseuses invited medical patronage from eminent doctors and asked for medical assistance in qualifying its students.

From the perspective of the actor-based framework, the early pattern of interaction is based on two actors only, rather than on three as health care became nationalized. These actors were: the profession itself and the dominant medical profession. The first strategy of the masseuses appears to have been "organization" - forming the Society of Trained Masseuses, which echoes Caplow's model (1954) of professionalization.

Seeking formal patronage from the dominant and prestigious medical profession may have raised the new occupation's status and is likely to have provided employment opportunities for the new occupation. However, it also made it easy to control the masseuses.

An important aspect of the medical profession's control was its involvement in "qualifying students", which controls the knowledge base and therefore also access to the profession. All of this amounts to a pattern of complete control over the predecessors to contemporary physiotherapy - at the invitation of those who were controlled.

### **"Organization" - preparatory steps towards autonomy**

It seems that this total pattern of medical "patronage" ((Johnson' term (1972)) continued until and beyond the point of entry of a third actor - the state, which brings us to the creation of the NHS in 1948, and the second snapshot. The major difference between the



early years of the profession's existence and the first half of the century appears to have been increasing and intensive organization by the profession itself - "organization" being a key resource which professionals use in the pursuit of self-control (Burrage 1990).

Having been granted its Royal Charter in 1920, the Chartered Society of Physiotherapy, as it had become known from 1942, developed a centralized and efficient bureaucracy (its "Council" and "Branches"). However, medical dominance continued as before because doctors were appointed as Chairmen of the central decision-making body of the Society - its Council. Another mechanism for medical influence on the Society's affairs was membership of Council where seven out of the eight co-opted members were doctors in a total membership of thirty. This meant that roughly one quarter of the membership of the Society's central decision-making body were doctors (Jones 1991).

By contrast, the present forty-six-member Council has three medical members (Jones 1991) only. Council now consists of: seven co-opted members (three medical, two lay members, one Department of Health Physiotherapy Officer and one other); two student members and thirty-seven physiotherapist members (Jones 1991). It is chaired by a member of the physiotherapy profession.

"Organization" is, as stated earlier, one of the major resources which professions use to pursue their goal of self-control. Based on the literature about the professions, Burrage (1990) distinguished four ways of how professions organise themselves: as "learned societies or academies"; industrial relations departments ("lobbying"); "examining and qualifying" and "regulating the members of the profession".

From its early days there had been evidence that the CSP functioned in all of these areas. It had lobbied the medical professions; it had lobbied the state to gain the Royal Charter. It had "examining", "qualifying" and "regulating" functions, but all of these were influenced by the medical profession via the chairmanship of Council and the number of medical members at Council.

True to Wilensky's (1964) description of the process of the actual process of professionalization (which is not the focus here), interprofessional conflict between the encompassing profession and the emerging profession followed the process of early organization in physiotherapy.

## **The Cope Report (1951) and the first challenges to medical patronage**

This conflict was prompted by the Cope Committee's recommendations which attempted to consolidate medical patronage. The Cope Committee, which had been set up to report on "the supply and demand, training and qualification of certain medical auxiliaries employed in the NHS" (DHSS 1951, p.1), reaffirmed that physiotherapists were "auxiliaries" who "assist medical practitioners...in the investigation...of disease by virtue of some special skills acquired through a recognized course of training (DHSS 1951; p.1). Physiotherapists were to continue to work as assistants to doctors.

The dominant role of the medical profession was emphasized again in the following recommendation.

"In every hospital one consultant, preferably a specialist in physical medicine, should be given the oversight of a department...to prevent unnecessary work in the physiotherapy department, treatment should be prescribed in all cases by a medical or surgical specialist...the general direction of studies in each school should be in the hands of a medical practitioner who should, wherever possible, be a specialist in physical medicine."

(DHSS 1951; pp. 99-100)

It is evident from this excerpt that both, knowledge and the application of knowledge in practice were to be controlled by the medical profession via specialists in physical medicine who were to become the directors of physiotherapy training schools and thus were to control the qualifying exams.

In the field of "clinical practice" doctors were confirmed as managers of physiotherapy services and clinical physiotherapy practice was prescribed by doctors. Physiotherapists were "auxiliaries" who "assisted medical practitioners" and needed supervision by the medical profession "to prevent unnecessary work".

However, the Cope Report's recommendations were met with widespread hostility from all of the seven professions included in the Report. As a consequence, the Report was never implemented, and the response of the Ministry of Health was to re-open discussions in 1954, which eventually resulted in the Professions Supplementary to Medicine Act 1960.

## **The Professions Supplementary to Medicine Act (1960) - increasing autonomy based on organization "by" the state**

The next snapshot was then one in which the initiative for organization moved from the professions to the state, resulting eventually in the achievement of a greater degree of autonomy for the physiotherapy profession and first acknowledgements of its impending "professional" status.

The 1960 Act provided state registration for all of the seven professions and therefore a system of compulsory registration which also meant "support of the Law for practice" (Jones 1991). This meant that "practice" became "organized", which was likely to enhance the profession's status.

Most importantly however from the point of view of "organization", the Act instituted a statutory framework (the Council for the Professions Supplementary to Medicine (CPSM), which gave the professions a degree of self-regulation. The CPSM had the capacity to approve the setting-up, conducting and awarding of physiotherapy qualifications. It inspected physiotherapy schools and was responsible for approving any changes in the curriculum, qualifying procedures and code of conduct. Standards of practice were supervised via the state registration scheme administered by the CPSM.

Nevertheless, the decisions taken by the CPSM had to be submitted to the Privy Council and to the Secretary of State who had ultimate control over decisions taken by the CPSM. This meant that the state had become very actively involved in regulating the profession, rather than agreements being reached between physiotherapy and the medical profession, as before. To use Johnson's concepts of control (1972), "patronage" by the medical profession had been weakened and been replaced by control by the state. "Mediation" (Johnson 1972) had become stronger. Nevertheless, the net gain for physiotherapy was an increase in the physiotherapy profession's self-control and a greater degree of organization.

If we compare this pattern of interaction between the three actors, and its outcomes with the period before the 1960 Act, it looks as if the medical profession had been rebuffed, its power curbed and the state had now become the key actor in controlling physiotherapy and the other six professions under the umbrella of the CPSM.

However, if we look more closely at the structure of the CPSM, a strong bias in favour of the medical profession emerges - its influence over the para-professions not as diminished as it might have appeared at first glance. Once again, influence over decision-making in

physiotherapy hinged on the number of seats on the decision-making body. The Council of the CPSM is a federated structure of all of the seven professions supplementary to medicine (\*), with each profession being represented by its "Board" on the Central Council of the CPSM. Each profession has its own "Board", on which it has a majority from its own profession. For example, the "Physiotherapists' Board" has nine elected physiotherapists, six physicians, one educationalist, which gives physiotherapists a majority on the Board (Jones 1991).

However, control is lost at the Central Council of the CPSM which has twenty-one members altogether. All seven professions supplementary to medicine have only one seat each, but the medical profession has three representatives from the English Colleges, two doctors from the Scottish Colleges and a doctor representing the General Medical Council. The remaining seats are occupied by Health Ministers, and lay members. The CPSM's structure therefore gives doctors by virtue of numbers an important say in key aspects of professional autonomy.

Alaszewski (1978) adds forms of medical control which are perhaps more subtle in comparison with the formalized hegemony of the CPSM. He found that the medical profession exercised considerable influence over the knowledge-base in physiotherapy via membership of the key education committees. So Hainsworth (1978), Alaszewski's co-author states that, "It appears that it is these medical advisors (i.e. those on educational committees) who determine to what areas of the medical knowledge corpus the physiotherapists shall have access" (Alaszewski 1978; p.6).

The conclusion about this "snapshot" is therefore that the state had become actively involved in mediating the conflict between the two professions. It assisted the medical profession in maintaining a - covert and overt - degree of control over physiotherapy. At the same time the state enhanced organization of physiotherapy and therefore also greater self-control.

Nevertheless, the general policy thrust towards more autonomy, raises the question, "What made the state act more favorably towards these professions?" Although medical influence was still considerable, a possible mechanisms for eventually achieving greater self-determination had been provided by the state. Had it been the professions' "refusal to co-operate", as Jones (1991) suggests, or were other, and possibly more fundamental, factors

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(\*) (physiotherapists, occupational therapists, chiroprodists, dieticians, medical laboratory scientific officers, orthoptists and radiographers).

at play ? Was it the "contingency" (Torstendahl 1990) in the shape of the state's "economic rationality" (Alaszewski 1978), which determined the new characteristics of the profession.

Alaszewski's study (1978) of the physiotherapy profession's increasing autonomy supports the idea of economic rationality as the contingency which enhanced the autonomy of the profession. He showed that the opportunity for establishing independent paramedical services arose only with the creation of the NHS and particularly with the evolution of the "concept of the District general Hospital" (DGH). "Hospital services" were seen as "units of medical specialities" which were made up of "units of staff and patients", rather than physical units (wards/buildings). This meant that paramedical workers were defined as "supporting services to be provided to the hospital" rather than as NHS employees which were allocated to a consultant or speciality (Alaszewski 1978). The reason for this conceptualization of services was based on the state's overall policy goals: the "rationalization and integration" of clinical services, as laid out in the Grey Book.

It seems therefore that the state's role as the public employer of professionals and its "economic interests as the "ultimate service user" (Burrage 1990) in a nationalized system of health care determined its function as the "regulator of professional life" (Burrage 1990). The question of resources seemed to have shaped the power of the professions and their pattern of interaction. At this stage then the physiotherapy profession's interest in autonomy and the state's economic interests coincided.

### **"Watersheds in independence"**

It seems then that the first four "moves" towards the solution to medical hegemony (described so far) might be seen as "preparatory steps" which set the scene for "watersheds in independence". The next snapshot in the growth of the profession's autonomy occurred during the 1970s, and the type of interaction displayed by the three actors appears to be a replay of earlier behaviour. The medical profession attempted to re-assert its dominance; was rejected; greater self-control than before was gained. Jones (1991) calls period "a watershed in independence" because greater autonomy in the managing physiotherapy was accompanied by greater autonomy in clinical decision-making. Autonomy began thus to filter down to the level of the actual professional practice.

### **The Tunbridge Report (1972)**

The first move then was the medical profession's attempt to re-assert its dominance, using the state bureaucracy - the DHSS - as a means. The Tunbridge Committee - an all-doctor

committee - was convened to "consider the future provision of rehabilitation services in the National Health Service, their organization and development..."(DHSS 1972). But this time, the professions under consideration were not all seven professions under the umbrella of the CPSM, but three professions only: physiotherapy, remedial gymnastics and occupational therapy.

Tunbridge recommended that a consultant with "overall managerial responsibility for the rehabilitation services" should manage physiotherapy, occupational therapy and the remedial gymnastics, and should also "decide how the general day-to-day running of the rehabilitation department should be organised according to local circumstances..." However, responsibility for day-to-day treatment of patients was "permitted to members of the remedial professions, provided they are always under the supervision of the appropriate consultant" (DHSS 1972).

The consultant was also to be responsible for planning of general programs of rehabilitation for patients, organizing facilities for the assessment of social, vocational and clinical aspects of disability, and the reasonable deployment of all remedial staff from the most senior therapist to physiotherapy helper. The training of physiotherapy students would be in accordance with the techniques and practices likely to be prescribed by consultants. Consequently, there was no need to encourage physiotherapists to evaluate practice through research.

Perhaps not surprisingly, the Tunbridge Report was never implemented. Jones (1991) believes that this was the result of the remedial profession's widespread rejection of its recommendations. Their rejection certainly represents a repetition of the strategies which had been employed after the publication of the Cope report (1954). However, the major difference between earlier strategies and the three professions present reaction was the profession's "well-organized" and "positive" response to the Tunbridge proposals.

The Committee on the Remedial Professions (of which the remedial professions were members, and with whom the Tunbridge Committee worked in close liaison) produced a "statement" which expressed the need for the provision of representation from the remedial professions on advisory committees at regional and area health authority levels, to ensure participation in the policy-making and decisions which affected their work. The need for research to evaluate physiotherapy practice was stressed, and it was also recommended to set up a career structure with more senior posts for clinical, research and teaching responsibilities (DHSS 1972).

Making constructive proposals in response to the medical profession's recommendations indicates that these professions had developed a fairly high degree of organization and confidence in the two decades since the Cope Report (1954). It is likely that the degree of organization needed to produce a joint response from the three, often competing, professions (physiotherapy, remedial gymnastics and occupational therapy), had its base in the organizational framework set up by the Professions Supplementary to Medicine Act (1960). It seems therefore plausible to argue that these professions had acquired a reasonable degree of political sophistication.

### **The McMillan Report (1973)**

Possibly because of a combination of protests, better organization and the economic pressures favoring greater autonomy, a Working Party (chaired by McMillan) was set up by Sir Keith Joseph (the then Secretary of State for Social Services). The remit of the Working Party was to make recommendations on the future role of the remedial professions in relation to "other professions and to patients, and on the pattern of staffing and training needs..." (DHSS 1973). Each of the three professions was represented by one senior member from its profession. Other members of the working party were a representative from the CPSM, four members from the DHSS and an observer from the Scottish Home and Health Department.

The Working Party acknowledged that the remedial professions had very limited managerial responsibilities because they were often represented at management and policy-making levels by the nursing or medical professions. It was admitted that this system of representation led to difficulties for the remedial professions and that "such limitations [were] not conducive to the development of a feeling of responsibility".

The McMillan Report therefore proposed that the remedial professions should "organize their own departments...within a framework set up by consultants" because these recommendations were "in keeping with the principle that professional people are more properly managed by members of their own profession" (DHSS 1973).

The Committee "[believed] that it [would] be practical for the professions to co-ordinate, organise and administer their own services" (DHSS 1973). This proposal was strengthened by the proposal that "a therapist at District Health Authority level" should have "the responsibility for managing hospital services as well as community services".

McMillan also spelled out a concern over the requirement of doctors to prescribe and supervise in detail the therapy provided by the remedial professions. Although the doctor was acknowledged as the "key figure" who carried primary responsibility for the patient, the Working Party expressed concern that this was frequently interpreted that doctors had to prescribe and supervise therapy provided by the remedial professions.

The Committee therefore recommended that "the doctor would normally provide a diagnosis, and set out the aims of the treatment and its limitations and contra-indications if any"...[and] "would probably say when he expected to review the case". However, the Report went on to say that, "Within this framework the nature and duration should be for the therapist to determine"...[because] "both doctors and therapists often start and continue inappropriate treatment and we feel that both have equal right to terminate treatment which they consider not to be of value."

The reasons for physiotherapists rather than doctors determining the nature and duration of physiotherapy treatments was surprisingly openly stated in terms of the medical profession's lack of skill to make decisions about physiotherapy "techniques".

"Few doctors who refer patients will be skilled in the detailed application by therapists of particular techniques.."

(DHSS 1973)

To summarize this important watershed in the profession's progress towards clinical and managerial autonomy, the McMillan Report contained a number of major steps towards professionalism in physiotherapy. For the first time "medical skills" and "physiotherapeutic skills" were seen as the separate and distinct. The acknowledgement of difference was underpinned by rights - the "equal right" - of the referring doctor and treating physiotherapist to "terminate treatments" which were considered "not to be of value". Physiotherapists now also had the right to determine the nature and duration of physiotherapy treatments. However, the doctor was still responsible for a fundamental component of professional work - making a diagnosis.

The McMillan Committee also drew attention to the necessity of a change in social relationships between doctors and therapists. Having shifted responsibilities in favour of greater autonomy in the therapy professions required building new and "professional" relationships between the remedial professions and the medical profession. And the Committee therefore recommended that doctors and therapists should "work together in an



atmosphere of mutual respect and appreciation", which was given force by the Committee's statement that it "attached the greatest importance to this relationship" (DHSS 1973).

Finally, McMillan proposed in-service training and career development for physiotherapists. Management and research were acknowledged as essential developments in the remedial professions. This means that evaluating and updating the professional knowledge base of physiotherapy through research and in-service training were seen as the basis for professional clinical rights and duties.

### **NHS re-organization 1974 - further steps towards "managerial" autonomy - the district physiotherapist post**

The developments in professional autonomy, which had their roots in the McMillan Report 1973, were given further impetus through the re-organisation of the NHS in 1974. Firstly, although total managerial independence for physiotherapy was not proposed, the need for a professional head of service on the "district-wide" basis was retained.

"The paramedical services have been organised mainly in very small sections and departments within the hospital service, and, in some few cases, within the local authority service. Most of these services, will be organised on a district basis, to be available both within hospitals and to medical practice outside hospital..."

(DHSS 1972)

Furthermore, under the provisions of the Grey Book it was possible for the professional head of service, in conjunction with consultant medical staff, to give advice to the District Management Team (DMT). This meant that for the first time physiotherapy had direct access to the top management team of health authorities.

Thirdly also, under the new provisions of the Grey Book, "Heads of Physiotherapy" could be accountable to a consultant in Physical Medicine - or - a direct appointee of the Area Health Authority, such as the District Administrator. This meant that accountability for physiotherapy services could now rest outside the medical profession.

The Grey Book's provisions for managing physiotherapy services were reinforced by a health circular on "The Remedial Professions and Linked Therapies (DHSS 1974), and the "Report of the Sub-group on the Organization of the Remedial Professions in the National Health Service (DHSS 1977) also recommended that the "Districts should appoint District Therapists in physiotherapy...to manage, organise and plan their services".

Two years later, Health Circular HC(79)19 reiterated the view "that the professions should be managed by themselves via the district physiotherapist posts". But, in spite of these district physiotherapist appointments not being mandatory only ((HC(79)19)), approximately 160 out of 200 District Health Authorities had made District Physiotherapist appointments by the time the Griffith Report published in 1983 (Jones 1991). Physiotherapists had thus achieved a substantial degree of managerial autonomy.

### **Final steps towards "clinical" autonomy**

At the same time as managerial autonomy developed, clinical autonomy progressed. Like managerial autonomy, clinical autonomy had its roots in earlier developments, and in particular in the McMillan Report. Health circular HC(77)33, which was issued as a code of practice for the medical profession and the remedial professions, largely confirmed the degree of professional independence and responsibility of physiotherapists initially proposed by Mcmillan. However, since health circular HC(77)33 was a recommendation by the Standing Medical Advisory Committee, it seemed to set the seal of medical approval on the earlier recommendations made by the non-medical McMillan Committee.

Health circular HC(77)33, which has the title "Health Services Development - Relationship between the Medical and Remedial Professions", acknowledged the right of physiotherapists to make their own decisions about the appropriate form of treatment for patients referred by a medical practitioner. It also confirmed the right to the physiotherapist to terminate treatment on the basis of their professional judgment.

Nevertheless, referring patients for physiotherapy was not seen as "handing over total control of the patient", but was interpreted as "one professional asking another trained professional for help". This meant that the referring doctor still carried some kind of "overall responsibility". The health circular also stated that the therapist had a "duty" and consequential "right" to decline to perform any therapy which her/his professional training and expertise suggested as actively harmful to the patient.

Although all four rights and duties had been recommended by McMillan, there were two distinct advantages to issuing the circular. Firstly, from the practical point of view of implementing the "recommendations" at the level of professional practice, a circular is a "more practical" document to use in negotiation than a lengthy government report. In my own experience as a physiotherapy clinician and physiotherapy manager, the only document

used in the frequent interprofessional conflicts over the rights and duties of each profession, was in fact the circular - not the McMillan Report.

Secondly, a footnote to Circular HC(77)33 possibly paved the way towards physiotherapy treatments without any referral from medical practitioners, which came into effect in 1987 with a change in the rules of professional conduct of the Chartered Society of Physiotherapy. The circular's footnote, which is an extract from the "code of practice" for physiotherapists, drew physiotherapists' attention to the "special conditions" under which they were entitled to treat patients without medical referral. This was: "in an emergency or for some exceptional reason, or unless [they had] direct access to the patient's doctor".

"Direct access to the patient's doctor" was now interpreted to mean the "presence of doctors at the district general hospital site". Because doctors are always present at a hospital site (where physiotherapists also treat patients), the practice of formal, written referrals petered out by mutual agreement between doctors and physiotherapists. This meant that physiotherapists treated patients without formal referral - a practice described as the "tacit" (or blanket) referral.

Treatment after "blanket referral" was reinforced by the new staffing structures ((Halsbury Report (DHSS 1975))), which widened the scope for physiotherapy specialist (senior 1 and senior 2) posts, and meant that many medical specialisms at a district general hospital site had a senior physiotherapist as a member of the medical/nursing specialist team ((as described in my "re-structuring" of the local physiotherapy service (chapter one))). Being a member of a multi-disciplinary team meant that relationships between the medical profession and physiotherapy were likely to become less distant and less formal - making formal referral unnecessary.

### **Full managerial and clinical independence through NHS re-organization (1982) and the CSP's new rules of professional conduct**

Further progress towards full managerial and clinical independence came about in 1982 with the re-organisation of the NHS and changes in the CSP's rules of professional conduct. The aim of the 1982 re-organisation, which was based on the consultative document "Patients First" (DHSS 1979), was to simplify the organizational structure of the NHS, in order to move the responsibility for decision-making closer to the locality for which services were being provided.

Within the new framework of decision-making, the DHSS raised questions about managerial accountability, and advice was - once again, issued on "District appointments" in HC(80)8. The directive stated that,

"...Authorities should assure themselves that a manager can appropriately be held accountable for the work of a particular individual...[which is] especially relevant when considering whether a member of the administrative disciplines [can] be made managerially accountable for non-administrative staff".

(DHSS 1980)

The professions were to be managed by members of their own professions because only this type of organization made full managerial accountability possible.

### **New rules of professional conduct (1987)**

Full clinical autonomy followed with a change in the rules of professional conduct, issued by the CSP in 1986/87 rather than by the DHSS. In its introduction to the new rules, the CSP explained that its rules of conduct needed to be changed "to reflect current practice" and "acceptable patterns of behaviour of the time" (CSP 1987). It was also made clear that the Society considered itself the "guardian of a discrete body of knowledge" in physiotherapy, and as such, it was the duty of the Society to change its rules.

"Rule 1: Scope of Practice" sets out the "scope for independent clinical practice" and makes it clear that independent practice is based on the physiotherapists' ability to establish a "clinical diagnosis" in their area of expertise.

"Chartered physiotherapists shall confine themselves to clinical diagnosis and practice in those fields of physiotherapy in which they have been trained..."

(CSP 1987)

Rule 1 distinguishes carefully between a "clinical" diagnosis and a "medical" diagnosis. A clinical diagnosis is made only by physiotherapists in those fields in which they are trained. The new rules of professional conduct also stressed that this ability to diagnose was based on appropriate "training" and "experience". Training represents formal physiotherapy education and experience is the application of knowledge in practice (skills).

"Training is defined as the accumulation of knowledge and skills gained by formal education and by experience evaluated at the level of competence acceptable for independent clinical practice."

Rule 3, which refers to the "relationship with medical colleagues", states that, "Chartered Physiotherapists shall communicate and co-operate with registered medical practitioners in the diagnosis, treatment and management of patients". The key element of the relationship with the medical profession has therefore shifted from the issues of patient "referral" and the determination of treatment content to issues of "communication and co-operation".

Only in the small print of Rule 3 is it then made explicit that physiotherapists may treat patients without a referral from a doctor. "This rule does not restrict those Chartered physiotherapists who so wish from accepting the responsibility of independent professional practice."

In spite of this most important right to autonomous professional practice being "hidden" in "small print", this meant that the relationship between the medical profession and the physiotherapy profession had radically changed from medical hegemony to complete independence in the clinical arena. Physiotherapists now controlled their own practice based on professional standards and without the need to appeal to any higher authority.

### **Summary, discussion and insights**

The account of the interaction between the two professions showed that although physiotherapists had initially invited the patronage of the medical profession, their attempts to free themselves from medical control were not successful until the state had established its authority in the new NHS after nationalization in 1948. This was when the state provided a modicum of "organization" ((a "resource" in the strategies of professions (Burrage 1990)) as a preparatory step for gaining independence.

In the struggle between the two professions, lasting from physiotherapists' rejection of the Cope Report in 1954 to 1987 (when full clinical autonomy was achieved), the state seemed to have been physiotherapy profession's most powerful ally.

It seems that both professions pursued control of physiotherapy with great "persistence", which Burrage (1990) had identified as a resource used by professions in the pursuit of their demands. It was however the state which provided the type of "organization" via the Council for Professions Supplementary to Medicine which made it possible for all of the

professions to achieve a modicum of success in the degree of autonomy granted at that time.

It seems that although the state provided the necessary organization to pursue the goal of self-control, it had nevertheless its own interests in establishing its authority in the new NHS. Burrage (1990) noted that "establishing state authority" and "fiscal interests" are two state goals in the state's interaction with professions.

It seems that in particular the second goal: fiscal interests (("economic rationality" (Alaszewski 1978))), have been a key interest underlying the state's mediation in favour of the remedial professions. The assumption was that the remedial professions would function in a more efficient and therefore more cost-effective manner if they were managed by members of their own profession.

## **CHAPTER EIGHT**

### **TYOLOGIES OF KNOWLEDGE AND SKILLS IN PHYSIOTHERAPY**

Introduction.

Outlines of roles A and B: "technician physiotherapist" and physiotherapist in "basic professional" role.

The process of constructing typologies of knowledge and skills for physiotherapy for role A and B.

Summary tables of knowledge and skill categories (A and B).

Outlines of roles C and D: the physiotherapist in a "semi-complex professional" and "complex professional" role.

The process of constructing typologies of knowledge and skills for physiotherapy for roles C and D.

Summary tables of knowledge and skill categories (C and D).

#### **Introduction**

One result of information-gathering in chapters five and six was the construction of four typologies of knowledge and skills for physiotherapy, which were used to test the actual knowledge and skills used in local physiotherapy practice.

The typologies were largely based on the knowledge and skill system extracted from the literature about the professions, and had been used to "pre-test" the "professionalism" of physiotherapy knowledge, as described in various physiotherapy journals. The opinion of physiotherapy professionals, as well as an analysis of descriptions of clinical work had been taken into account and the new curriculum of study had been examined for the professionalism of its knowledge-base.

One result was the discovery that physiotherapy still lacked a "general theory of physiotherapy". Although its theoretical knowledge-base was therefore deemed to be limited at its most complex point, the analysis had also shown that theories and concepts (labelled "approaches") were used in physiotherapy practice. Some concepts from the basic sciences had been adapted for use in physiotherapy theory and practice, forming the basis of an applied scientific theory exclusive to the physiotherapy profession. To establish that these ideas were "used" in today's physiotherapy "practice" meant that these categories needed to be included in the typologies.

Other ideas and insights from the earliest part of the study (the decision-making pilot) were also useful. The concepts contained in axiomatic theory and work stratum theory contributed especially to the construction of the typologies.

Axiomatic theory contains links between professionalism and depth of knowledge (specialism), as well as breadth of knowledge. Kakabadse's (1982) testing of axiomatic theory in another aspiring profession (social work) and work stratum theory (Kinston 1981) were useful because both studies described a range of tasks and roles, which were used as the basis for the conceptualization of four possible roles in physiotherapy.

The focus of this study was the specification of different types of knowledge and skills used in these different roles. The idea of role was mainly used as a collection of concrete tasks upon which the knowledge and skills required for a particular role could be specified.

The typologies could have been constructed solely on the basis of the key ideas from preliminary information-gathering. This did not happen because I wanted to add practice-based knowledge about physiotherapy to the fairly abstract concepts about professional knowledge systems, in particular as my management role provided me with a ready-made opportunity to refine the typologies through discussions with reflective and experienced physiotherapy practitioners.

Secondly, this research project had been - from its beginnings - firmly rooted in finding solutions to practical management problems, and continued to be informed by this goal. If this study was to contribute in any practical way to solving management problems, the knowledge derived from research needed to be sufficiently concrete to be useful to managers who usually pride themselves on being "practical people". This meant that the knowledge and skill categories needed to be at an "intermediate level of abstraction between knowledge of specifics and knowledge of universals" (Bloom 1956).

One possible way of pitching the categories at this "intermediate level of abstraction" was to base the typologies in the knowledge-in-use of practicing professionals, whilst at the same time using the professionalism concepts as described in the literature. The bridge between the abstract professionalism concepts and the more concrete knowledge about the actual knowledge used in professional practice seemed to be the interpretations of professionalism concepts by physiotherapy practitioners.



Because this seemed a fairly difficult task for my physiotherapy colleagues, who, like managers pride themselves on being "practical people", the most appropriate scenario seemed a group discussion, rather interviews with individuals.

The importance of bridging the language of research and the language used by professionals used in practice has since then been described by Svensson (1990). Svensson's study of psychologists and architects showed that researchers may not be able to "detect" the scientific concepts used by professionals because professionals "convert" scientific concepts into the thinking and language used in their specific profession, which is more "practical" and more concrete. For example, a scientific theory like psycho-analytic "theory" may become the Freudian "approach" and the actual concepts of the theory may be used intuitively and implicitly (Svensson 1990).

Although I was a researcher who spoke the language of research and the language of a profession, I was nevertheless trying to prepare myself for the "detective work" of the main interviews with the physiotherapy staff with care. This seemed particularly important because I was a relatively inexperienced researcher who was doing research in a difficult area of research. I was also aware from the pilot interviews about decision-making in physiotherapy that some of my staff found it difficult to reflect and to talk about physiotherapy.

There was a second reason for trying to bridge the gap between the language of research and profession: my own concern for the usefulness of my research to the profession of physiotherapy. Typologies of knowledge and skills which are congruent with professionalism have a number of practical uses. They can form the basis of education programs in physiotherapy. But, to be taken note of by a profession which prides itself on being "practical", the project had to be couched as closely as possible in a language which was accessible and attractive to the physiotherapy profession.

However, a disadvantage emerged after the typologies had been constructed. Being rooted in the language knowledge and skill used in practice, these categories lacked the "neatness" of the categories used in the literature about the professions. They were however not "re-adjusted" to preserve their relatively concrete character for use in the interviews with the "practical" and "practice-minded" physiotherapists.

The debate about knowledge and skill - here and in the chapter on professionalism - also led me to consider the balance of the content of the typologies. The literature about the knowledge used in professional practice tends to use the term "knowledge system" - the

emphasis being on knowledge rather than on skills. On the other hand, the link between practice (skill) and knowledge is emphasized. Thus, Svensson (1990) stated that "knowing what to do is bound up with skill", where "skill" is an "organized mode of operation of dealing with problems in which knowledge is used (Bloom 1956).

This meant that both, knowledge and skill had to be included in the typologies. But although knowledge and skill are closely linked in professional practice, they also needed to be distinguished in my research because I was aware that, like other professionals, physiotherapists may have "knowledge of" something without having the skill to incorporate this particular knowledge into the practice of physiotherapy.

A good example of this had come to light in my analysis of the theoretical content of the literature about physiotherapy practice. We had seen that - some - physiotherapists "knew" that the profession needed to develop a "general theory of physical therapy". But although the "shape" of this future theory had been thought out, the theory had not yet been developed, possibly because of the relatively limited level of research skills in physiotherapy.

Whereas the identification of need and the mapping of the shape of theory indicated a certain degree in the development of professionalism, the actual production (which requires the skill to produce the theory) would have meant a higher degree of professionalism.

Bloom's taxonomy of cognitive definitions (1956) was most useful in distinguishing between the differences and similarities of knowledge and skill for my own research project. Bloom defines knowledge as a "cognitive ability", which as "knowledge of" "facts" involves the ability to "remember". But Knowledge which is more complex (like "knowledge of theory") demands not only memory but also "understanding".

"Dealing with" more complex "knowledge" is thus similar to dealing with "skill" because in both instances "organized modes of operation and generalized techniques" (Bloom 1956) need to be used to handle knowledge and skills in problem-solving.

Nevertheless, the skill elements of the typologies are based on "intellectual" type of skills, rather than on the "practical" ("manipulative or motor") skills which some professions (like physiotherapy or surgery) use. Although intellectual skills are bound up with "practical" skills, they are not the subject here.

Finally then the sequence of this chapter. The outline of the first two physiotherapy roles ("technician" and "basic professional") is presented first to provide a sense of physiotherapists' clinical roles.

Of the two roles the basic professional role is possibly the most fundamental and most frequently used role now. Like the technician role it is a predominantly clinical work.

The technician role is possibly fairly rare now, except where physiotherapists qualified many years ago and have not updated their knowledge and skills. This is also likely to be associated with working in relative isolation from other physiotherapists.

The physiotherapists participating in the group interviewees thought that the technician role and professional role could be found in most physiotherapy services. One of the interviewees, who was the manager of the paediatric service, thought that her staff worked predominantly in the technician mode. They used relatively few professional techniques in their work, with the exception of diagnosing abnormalities in function and mobility in children.

The group interviewees also thought that another local specialist service (the service for elderly people) was functioning predominantly in the technician mode. However, this service was perceived to be in a phase of rapid change toward a professionalisation.

The outline of the first two physiotherapy roles ("technician" and "basic professional") is followed by a description of how the typologies of knowledge and skills were constructed.

The same format is followed for the other two of the four roles ("semi-complex" and "complex" professional role) in which responsibilities for organizing physiotherapy services are added to clinical roles.

The typologies of knowledge and skills were eventually used as the basis for the main interviews, in which the extent to which a professional type of knowledge and skill system were used in local physiotherapy "practice", was explored.

#### **Outline of role (A): the "technician physiotherapist"**

- The essence of this role is that its scope is limited to the clinical sphere ("treating patients"). Within this clinical arena, clinical activity is restricted to administering treatments in a technically competent and safe manner.

- The technician physiotherapist "treats patients", but organizing her/his daily caseload of patients takes up relatively little time. In an out-patient physiotherapy department any organization of caseloads is likely to be done by a physiotherapist in a supervisory capacity.
- The scope of the technician physiotherapist's clinical role is very limited in comparison with physiotherapists who function in the professional mode. This limitation arises from the medical practitioner a) diagnosing the patient's problem; b) referring the patient to the physiotherapist with a prescription, which outlines the nature of the problem (diagnosis) and the type of treatment to be given. This includes the number of treatments to be carried out.
- The only competence required from the technician physiotherapist is therefore her/his ability to administer technically competent and safe treatments, prescribed by a medical practitioner.
- Prescribed treatments tend to be standard types of treatments, such as "course of twelve treatments of short-wave diathermy, to be given three times per week followed by back extension exercises".
- Physiotherapists tend to work as generalists rather than specialists. - Although, as stated above, clinical work may in some clinical specialities be allocated by a physiotherapist in a supervisory role, work may also be carried out unsupervised. The latter will be due to lack of organizational structure or lack of interest in "managing" the service, as described in the outline of the initial management problem in chapter one.
- At the time of the group interviews the physiotherapists thought that the technician role had been the predominant mode in physiotherapy some ten years ago when some of interviewees had started their professional career. They also believed that this way of practising physiotherapy had not yet completely died out. It was nevertheless becoming increasingly rare as physiotherapists, trained under the new qualifying system, joined the service. However, at the time of my appointment to the local service, the majority of physiotherapists practised in the technician mode.

#### **Outline of role (B): the physiotherapist in a "basic professional role" - clinical practice in the analytical mode**

- The essence of this role is the physiotherapist's ability to function as a professional at the clinical level. This means access to patients without prior medical referral, the right and obligation to make a clinical diagnosis and to determine the nature of physiotherapy treatments.

- However, in comparison with the next role (the "semi-complex professional role"), this role centres firmly on clinical work. Physiotherapists in this role do not see themselves as having a major responsibility for organising and influencing the environment of clinical activity in such a way that optimal quality of care is the outcome.
- The essence of clinical activity is the analysis i.e. diagnosis of the problem to be solved by a physiotherapist, rather than by a medical practitioner.
- This analytical approach continues to inform all actions beyond the stage of the initial diagnosis because the physiotherapist observes her/his own actions ongoingly to assess the effects of any interventions. All actions are in this sense ongoingly experimental.
- This ongoingly experimental approach might become more systematic in when research comes to be perceived as essential to good clinical practice.
- This mode of practising physiotherapy is often claimed to be "based on science", built up through physiotherapy research. - "Judgment" and "experience" play a key role in the process of problem-solving.
- Practitioners work predominantly as specialists, rather than as generalists.
- The service ideal ("doing the best for the patient") of physiotherapists working in this mode drives professional knowledge and skills to a high level, which is specialism.
- Although practitioners in this role focus on clinical activity, a physiotherapist functioning in the "basic professional role" is likely to consider it important to plan clinical work in an efficient way. The more complex nature of clinical work will require greater competence in organising daily caseloads.

**The process of constructing the typologies knowledge and skills used by "technician physiotherapists" (typology A) and physiotherapists working in the "basic professional" mode (typology B)**

The process of constructing the typologies is described here in the order in which the categories (contained in the typologies) emerged during the group interviews. Some categories appear in the "summary tables" (end of chapter) in re-ordered sequence to convey the logic of the knowledge and skill system more clearly.

It seemed that the most fundamental question which needed to be asked was, "In what way do technician physiotherapists and physiotherapists who work as a professional think differently ?" Contrasting the two modes of thinking was intended to help the physiotherapists to think about this fairly difficult question.

The literature search had identified the professional mode of operating as: the ability to analyze problems using substantive, competing and scientific theories as a framework.

Analyzing problems in the context of clinical physiotherapy means diagnosing a clinical condition, which consists of "making sense of the problem" ("naming it") by selecting what is relevant to the problem (Schon 1983). This is followed by the process of "framing" - a process of imposing coherence on the problem which allows the professional to "say what is wrong" (Schon 1983). My earlier analysis of the literature about physiotherapy practice had also shown this type of professional thinking to be the aim of physiotherapy training.

The group interviews with the physiotherapists showed that the key distinction between professional and technician physiotherapists was the professional physiotherapist's ability to diagnose clinical conditions in her/his own right. In contrast, technician physiotherapists accepted the "medical diagnosis" made by a doctor as the basis of physiotherapy treatments, which was also prescribed by the doctor. The difference in the two modes was summed up rather neatly by the physiotherapists in the sentence, "'Physiotherapy was not been "thinking-job" - just a "doing-job. We were just carrying out instructions. "'

The physiotherapists were also aware that the two modes of operating rested on a distinction being made between "medical diagnosis" (made by a doctor) and a "physiotherapeutic" diagnosis (made by physiotherapists). The latter came to be labelled "clinical diagnosis", which was based on the examination of function and dysfunction of movement from a physiotherapeutic perspective. For example the "medical" diagnosis of cerebro-vascular accident (CVA or stroke) and the actual description of the damage to the

patient's brain are not the basis of the actions taken by physiotherapists. Their actions are determined by examining the patients loss of function and mobility, muscle tone etc. It is on the basis of the analysis of loss of function and mobility that actions are taken by physiotherapists.

The first type of professional skill identified was therefore:

*the ability to analyse (diagnose) physiotherapeutic problems*

The matching technician skill for "ability to diagnose..." was at first expressed negatively as an "inability":

*"the inability to analyse (diagnose) physiotherapeutic problems*

Morgan's (1986) distinction between "single-loop" and "double-loop" thinking was useful here. Double-loop thinking is "being able to take a "double look" at the situation by questioning the operating norms" ". "Single-loop thinking" is less analytical because "it rests on the ability to detect or correct error [only] in relation to a given set of operating norms".

Single-loop thinking is all that is required from technician physiotherapists. The operating norms are supplied by the doctor and the only task is to administer the treatments prescribed by the doctor in a technically safe and efficient manner. Physiotherapists may not even notice the inappropriateness of treatments because "single-loop" thinking is a relatively uncritical way of functioning.

The second category was a knowledge category which is the basis of the first category: the ability (or inability) to diagnose. For the professional physiotherapist this is:

*knowledge and understanding of the difference between clinical (physiotherapeutic)  
diagnoses and medical diagnoses*

For the technician physiotherapist the knowledge category is:

*lack of knowledge and lack of understanding of the differences between clinical  
(physiotherapeutic) diagnoses and medical diagnoses*

The third category in the typology refers to the theories used during the process of diagnosing. Since the knowledge used during the process of making a diagnosis is bound up with knowledge of theory and the skill to use these theories in practice, the theoretical categories from the literature search were included in the typologies. This was in spite of the fact that the group interviewees were very unclear about the nature and function of theories to professional practice. Nevertheless, the physiotherapists knew of "scientific" concepts and how they were used in physiotherapy practice. This included knowledge of scientific principles from (for example, physics) and how those were used in physiotherapy.

The area of lack of clarity about theory was the extent to which physiotherapy was "scientific" and was based on "its own theory". Nevertheless, the physiotherapists felt that physiotherapy had become increasingly "scientific". Science was used for more effective physiotherapy practice, and also to gain acknowledgement from other professions (such as the medical profession).

The following categories were thus included because of their weight in distinguishing professions from non-professions. A particularly important reason was also to see whether a clearer vision about the role of science in physiotherapy would emerge during the main interviews. The category of the professional knowledge systems included was:

*knowledge of the use of scientific theory in physiotherapy*

To test the existence of a theory which is "exclusive" to the physiotherapy profession, the following category was included:

*knowledge of the use of "physiotherapy" theory*

I felt that it was unlikely that technician physiotherapists would "know of" or "use" theories and these categories were therefore not included in the technician typology.

The real watershed from technician to professional was therefore considered to be the "ability to use theory in practice" (skill). This theory category was subdivided into three categories:

*the ability to use a) theories;*

*b) scientific theories;*

*c) competing theories ("approaches")*



*as a reference point for analyzing physiotherapeutic problems, which involves "naming" the problem (by selecting what is relevant), and "framing" the problem by (imposing coherence, in order to say what is wrong).*

This category has, for the reasons stated above, not been included in the technician typology (A). The physiotherapists were very aware that the process of analyzing a problem needed to continue throughout the process of treatment, which was recorded in the typology B as:

*the ability to "analyse ongoingly"*

*the ability to "act experimentally"*

For typology A the idea was recorded as "lack of ability...":

*the lack of "ability to analyse ongoingly"*

*the ability to "act experimentally"*

The phrases used here are identical to the terms used in literature because the group interviewees and I were not able to replace these rather abstract concepts with terms used in physiotherapy practice.

The group interviewees pointed out that the type of thinking which professional (as opposed to technician physiotherapists) use, may differ in another important aspect: technician physiotherapists think "more intuitively"; professional physiotherapists think "more rationally". There had been some earlier evidence for this distinction in the pilot study of decision-making in physiotherapy. As the physiotherapy service developed along more professional lines, the basis for decision-making seemed to become "more rational". The "well-constructed and logical case" became the basis for local decision-making.

The ability to make a logical and well-constructed case is possibly also a professional mode of functioning because professional thinking is based on the use of concepts which are linked and manipulated through the use of rationality. The concept of "thinking more rationally" (as opposed to "intuitively") was thus likely to be an "expression" (Svensson 1990) of the increased use of concepts in physiotherapy.

My interpretation was borne out by the physiotherapists themselves who thought that the use of a scientific body of knowledge in physiotherapy had made it possible to "make decision rationally". "Rationality" meant making decisions on the basis of "scientific

facts". This is why during earlier periods where physiotherapy had lacked scientific theories, decisions had been made intuitively.

Typology B (professional mode) therefore contains:

*the skill to use rational thinking in physiotherapeutic problem-solving*

This is reversed for the professional physiotherapist of type A:

*the skill to think intuitively during physiotherapeutic problem-solving*

The idea that professionalism in physiotherapy had "something to do with more complex knowledge" was also expressed by the group interviewees by reference to the idea of "specialism" (depth of knowledge). The physiotherapists thought that "a professional physiotherapy service employed more specialist physiotherapists".

I had changed the structure of the local physiotherapy service from a generalist structure to an organization which mostly employed specialists. My reason had been to make the service more professional, which was synonymous with a service of high levels of knowledge and skills. The idea of higher levels of skills being associated with specialism had also been built into the physiotherapy grading structure of the NHS. However, this grading structure existed well before physiotherapy services became professional in terms of the concepts set out in the literature. Hage and Aiken (1969) had also associated professionalism with specialism (or depth of knowledge).

It was however not clear whether specialism was necessarily associated with professionalism because it seemed that employees could be employed as specialists by an organization without necessarily functioning in the professional mode. Nevertheless, the decision was made to include:

*the skill to function in a specialist mode" in typology B; and the inability to function as specialist in the professional mode in typology A.*

Apart from specialism, Hage and Aiken had also linked "extensivity" (breadth of knowledge) to professionalism in organizations - a notion not found in any other literature about professional knowledge systems.

The physiotherapists also linked breadth of knowledge (defined as knowledge of other specialisms and other professions) with professionalism. Lack of knowledge about other specialisms and professions was associated with technician physiotherapy. The reason given by the physiotherapists was that, professional physiotherapists had a greater ability to see the relevance of the knowledge and skills of other specialism to solving their own clinical problems. Technician physiotherapists were unlikely to have the intellectual skill to detect these links or overlaps in specialisms, in spite of the fact that many of them worked as generalists.

The following categories were included in typology B (professional physiotherapy mode):

*knowledge of the skills of other physiotherapy specialisms and other professions (breadth of knowledge)*

In typology B the ability to "use" knowledge of the skills of other physiotherapy specialisms and other professions (breadth of knowledge) in one's own practice of physiotherapy was also included.

In typology A (technician mode) the following category was included:

*the inability to understand and use breadth of knowledge in physiotherapy practice*

The literature about professional knowledge systems had also shown that professionals conceptualize the problems referred to them as "unique", which means that the solutions to problems also have the quality of uniqueness.

The physiotherapists were aware that, in the past, patient's problems had been defined by doctors as "standard problems". For example, the diagnosis given to a physiotherapist by a doctor may have been "lower back pain", on the basis of which the physiotherapist would have provided a "standard treatment" consisting of "back extension or flexion exercises".

In contrast, professional physiotherapists establish the diagnosis themselves in accordance with criteria developed by the physiotherapy profession. The diagnosis is considered to be a unique combination of signs and symptoms, to be relieved by measures uniquely tailored to the patient's changing condition.

The physiotherapists were aware that the type of solution adopted to solve a problem follows from the way in which the problem has initially been identified (described above).

The physiotherapists compared the technician and professional mode of treating patients by saying that, "with the introduction of new ideas, we find what suits the patient best".

The two categories for the conceptualization and solution of problems in the professional mode were therefore:

*the skill to conceptualize problems as "unique", the unique nature of which has to be established through the process of analysis the skill to conceptualize solutions tailored to the unique requirements of the patient's condition*

In the technician more the two equivalent categories were:

*the skill to conceptualize clinical problems as "standard type of problems", rather than as problems whose unique nature has to be established through the process of analysis.*

*the skill to conceptualize standard solutions to standard type of problems*

The concept of patients with problems which are in some way unique and therefore require unique ("individual") solutions had been linked to the need and "ability to analyze" in the physiotherapists' reports. Both ideas were also linked to the need to "evaluate practice more systematically through research".

During the group interviews the physiotherapists reported that physiotherapy practice in the technician mode was usually not evaluated through research. One reason was that it was not seen as something which was necessary; the other reason was that research was "totally beyond the horizon of physiotherapists".

The physiotherapists said that, ""It all fitted in - "we just went on doing things without thinking much about it. People weren't asking, "Is this effective ? ""

The category about research included in typology B (basic professional mode) was:

*the ability to systematically evaluate physiotherapy practice through research*

The category about research included in typology A (technician mode) was:

*the inability to systematically evaluate physiotherapy practice through research*

The physiotherapists thought that a major skill of professional physiotherapists was the ability to "organize clinical work efficiently" because of their skill to "select the right patient" and to "treat the patient at the right time".

The first part of the statement is a highly significant point from the point of view of efficiency because it relates to the diagnostic abilities of professional physiotherapists. In many clinical areas of a hospital - for example a surgical ward - all ward patients are potential candidates for physiotherapy because the physiotherapist ("attached" to the ward) assesses all patients, in order to determine whether or not physiotherapy treatment is required. This is not necessarily achieved by examining each single patient but by reading the "nursing cardex" or/and by discussing patients with the medical or nursing staff. Patients' needs are assessed on the basis of the physiotherapists' ability to "critically overview" the ward situation.

The physiotherapists thought that technician physiotherapists were not competent in diagnosing patients' conditions from a physiotherapeutic point of view. They also lacked the ability to "critically overview" a caseload of patients, resulting in the treatment of some patients who did not really require treatment.

Another reason for treating patients unnecessarily was the physiotherapists' strategy "to play it safe". They chose to treat, even when they were uncertain whether a patients really needed to be treated. The reason was to avoid the possible consequences of not treating a patients ("being sued" on the grounds of professional negligence). Physiotherapists who function predominantly in the technician mode are not very efficient.

The first "organizing skill" for typology B (professional physiotherapist) was therefore:

*the skill to select a caseload of patients who require physiotherapy treatment*

The commensurate skill for typology A (technician physiotherapist) was:

*the "low skill" to select a caseload of patients who require physiotherapy treatment*

The second part of the physiotherapists' earlier comment about efficiency in physiotherapy ("treating patients at the right time"), seemed also to be a way of talking about the skill to organize a caseload of patients after the patients have been identified as suitable for physiotherapy.

This skill was accredited to physiotherapists who worked in the basic professional mode, but not to technicians. Professional physiotherapists have the skill to "make the most of their time" because the group interviewees thought that this is an aspect of "being a good professional in physiotherapy". The physiotherapists did not think that this link necessarily existed in some other professions, but was "definitely there in physiotherapy".

The interviewees thought that physiotherapists who worked in the technician mode had "poor social skills". This referred mainly to "the ability to communicate". The physiotherapists thought that technician physiotherapists communicated with patients by "issuing instructions or orders". In contrast, professional physiotherapists engaged in dialogue with their patients.

The physiotherapists thought that issuing instructions was possibly an appropriate and useful form of communication for technician physiotherapists because their treatments are standard type of treatment which are "administered to patients". However, this type of communication was not considered to be adequate for work in the professional mode because the nature of this work is "ongoingly experimental". Dialogue between patient and therapist is required to find out about the effects of treatments. One of the interviewees described this dialogue as part of the diagnostic and therapeutic process by saying, "I used to dismiss some of the bizarre symptoms which the patients tell you. Now I am a much better listener and if you listen to the patients carefully they will tell you what needs doing to them".

The social skill categories included in typology A as the predominant style of communication:

*style of communication: issuing instructions rather than negotiating with patients or colleagues*

In typology B the following category was included:

*style of communication: the ability to negotiate with patients*

The physiotherapists felt that the way in which the physiotherapists communicated with patients was also the basis of communication with physiotherapy colleagues and other professionals. Technician physiotherapists were therefore thought of as poor communicators. For typology A the skill was therefore expressed in negative form:

*style of communication: the low ability to negotiate with physiotherapy colleagues and other professionals*

In typology B the skill was:

*style of communication: the ability to negotiate with physiotherapy colleagues and other professionals*

## SUMMARY TABLES

### Summary table of knowledge and skills categories

#### Typology A (technician physiotherapist)

*the inability to analyse (diagnose) physiotherapeutic problems*

*lack of knowledge and understanding of the difference between clinical (physiotherapeutic) diagnoses and medical diagnoses*

*the category: knowledge of the use of (scientific) theory in physiotherapy does not apply in the technician typology*

*the category: knowledge of the use of physiotherapy theory not apply in technician typology*

*the category: the ability to use a) theories; b) scientific theories; c) competing theories ("approaches")...does not apply in the technician typology*

*the lack of "ability to analyse ongoingly"*

*the ability to "act experimentally"*

*the skill to think intuitively in physiotherapeutic problem-solving*

*the skill to function in a specialist mode does not apply*

*the inability to understand and use breadth of knowledge in practice*

*the conceptualisation of problems as "standard type of problems", rather than as problems whose unique nature has to be established through the process of analysis.*

*the conceptualisation of standard solutions to standard type of problems*

*the category: ability to systematically evaluate physiotherapy practice through research was not included in the technician typology*

*the "low skill" to select a caseload of patients who require physiotherapy treatment*

*communication style: issuing instructions rather than negotiating with patients or colleagues*

*communication style: the low ability to negotiate with colleagues and other professionals*



## Summary table of knowledge and skills categories for

### Typology B (basic professional physiotherapist)

*the ability to analyse (diagnose) physiotherapeutic problems*

*knowledge and understanding of the difference between clinical (physiotherapeutic) diagnoses and medical diagnoses*

*knowledge of the use of theory and scientific theory in physiotherapy*

*knowledge of the use of "physiotherapy" theory*

*the ability to use a) theories;*

*b) scientific theories;*

*c) competing theories ("approaches")*

*as a reference point for analyzing physiotherapeutic problems, which involves "naming" the problem (by selecting what is relevant), and "framing" the problem by (imposing coherence, in order to say what is wrong).*

*the "ability to analyze ongoingly"*

*the ability to "act experimentally"*

*the skill to "use" rational thinking in physiotherapeutic problem-solving*

*the ability to function as a specialist*

*knowledge of the skills of other physiotherapy specialisms and other professions (breadth of knowledge)*

*the ability to "use" knowledge of the skills of other physiotherapy specialisms and other professions (breadth of knowledge) in one's own practice of physiotherapy*

*the skill to use breadth of knowledge in physiotherapy practice*

## Summary table of knowledge and skills categories for

### Typology B (basic professional physiotherapist (contd))

*conceptualisation of problems as "unique", the unique nature of which has to be established through the process of analysis*

*the conceptualisation of solutions to problems unique solutions, tailored to the unique requirements of the patient's condition*

*the ability to systematically evaluate physiotherapy practice through research*

*the skill to select a caseload of patients who require physiotherapy treatment*

*communication style: the ability to negotiate with patients*

*communication style: the ability to negotiate with physiotherapy colleagues and other professionals*

### **Outline of role (C): the physiotherapist in a semi-complex professional role - clinician professional and skilled workload planner**

- The key difference between this and the previous role is the balance between clinical activity and organizing daily and weekly caseload of patients in an efficient way.
- The idea of efficiency (the optimal ratio between the input of scarce physiotherapy time and the highest output of treatment time) motivates practitioners working in this mode. The highest quality of patient care (the service ideal) is believed to be achieved not only through good clinical (technical) skills but efficient organization is necessary to harness clinical skills.
- Hence, the overriding motive remains the quality motive of the professional service ideal.
- In this role professionals become more conscious of managerial techniques and methods as a means of achieving quality, based on the realization that the environment requires to be managed by the professional in order to produce quality at the clinical level.
- In comparison with the basic professional role - the physiotherapist as clinician professional - the planning role also becomes more sophisticated. The intuitive process of planning in the clinician professional role, moves towards the rational and systematic level where explicit criteria are established to balance competing demands. Thus the rational processes inherent in the clinician professional role are carried forward to the planning level.
- It is at this level also that individual practitioners begin to see themselves as members of a team and of the professional community. - Hence the move from technician role to this level represents a widening of horizons in terms of the breadth and depth of clinical knowledge, as well as the aspects of work which are perceived to be legitimate professional activities.

### **Outline of role (D): the physiotherapist in a complex professional role - clinician professional and specialist service planner**

- The key difference between this and the previous role is the greater emphasis on organizing and planning in order to serve clients well.
- A physiotherapist working in this mode continues to function as a clinician professional, using generally the same clinical skills as in typology B (basic professional). But here long-term (strategic) planning skills are added to the clinical role and to the ability to engage in efficient short-term (operational) planning.
- This means the ability to identify gaps in existing services, to re-allocate resources in order to remedy deficiencies, to envisage future scenarios and to implement plans.
- As in the caseload planning of the semi-complex professional role, long-term planning begins to be undertaken on the basis of explicit rational criteria.
- This also represents a considerable shift from engaging in activities which are rooted in the "here and now", as opposed to being concerned about the future.
- Associated with this growth in time scale is a growth in the scale of the physiotherapists' universe. The physiotherapy professional moves from seeing herself as an individual practitioner relating to patients - "the patient and I" - to someone rooted in a specialist team of other physiotherapists.
- Physiotherapists working in this mode also tend to be members of multi-disciplinary teams. This also links her to the medical and nursing teams of hospital wards.
- Physiotherapists working in this mode see themselves and the physiotherapy service as a microcosm within a total service offering health care to the population of a health district.

**The process of constructing the typologies knowledge and skills used by physiotherapists working in the "semi-complex" professional mode (typology C) and physiotherapists working in the "complex" professional mode (typology D)**

The physiotherapists thought that the key difference between the knowledge and skills required for the basic professional mode, which is a predominantly clinical role, and these two roles were the management knowledge and skills required for the latter. But rather than these management responsibilities being a burden on professionals with busy clinical workloads, organizing the service was seen as an integral part of the professional role. It was seen as a source for "generating more time" and thus as an activity which enhances the quality of clinical work.

The physiotherapists thought that the semi-complex professional role was now a fairly common role in the profession. "Good organization" of daily work was seen as an accepted aspect of being a competent professional. A "good professional" was not only a "good clinician" but was able to "make the best of her/his time".

However, the skill to organize one's daily work on the basis of explicit and rational criteria was seen as fairly unique to the local service. As we shall see later from the physiotherapists' reports about the local service, this type of planning had been a particular response to a local crisis, prompted by staff shortages due to maternity leave.

Nevertheless, the complex professional role, which was thought to be the most sophisticated role, was perceived to be extremely rare amongst physiotherapists. Locally, the complex professional role had been initiated and "institutionalized" during "development planning", through which responsibilities for key aspects of long-term (strategic) planning had been devolved to the middle layer of the organization (reported in detail in chapters one and two).

As already mentioned, this was considered extremely rare in physiotherapy - a judgment based on the collective experience of the staff, including my own experience. This view had been reinforced by research about the practices of the profession from the perspective of work stratum theory (Kinston 1981), (reported in chapter 2). The study had shown that operational and strategic planning role were normally the responsibility of higher-graded superintendents and district physiotherapists, who may, or may not, consult with their clinical staff. This seemed to make my own management practice a radical departure from what happened in many physiotherapy services.

Because the physiotherapists had by the time of the group interview become experienced planners, they found it easy to identify the knowledge and skills required for short-term (operational) and for long-term (strategic) planning. The considerable number of knowledge and skill categories is possibly a reflection of the wealth of their knowledge in this domain.

The knowledge and skill categories about clinical work had been extracted from interviews structured around the knowledge and skill categories from the literature. No equivalent descriptions of management knowledge and skills used explicitly in professional work had been found in the literature about the professions. The categories listed here were therefore generated by the physiotherapists and by me based on our own experience of managing and planning the physiotherapy service. Nevertheless, Kinston's work on roles and tasks in the physiotherapy profession may have had some influence on the minds of the physiotherapists because it had been reported in the physiotherapy journal.

The clinical knowledge and skills required in these two more complex physiotherapy roles were considered to be "more or less" the same as those required in the basic professional role. It is nevertheless possible that clinical work based on specific quality criteria might result in higher quality clinical work. But this possibly "fine" difference was disregarded at this stage because the study was already very complex so that some aspects of reality had to be disregarded. The major divide in clinical work remained the difference in skills required for the technician work as opposed to professional work.

Because the knowledge and skills required for clinical work were considered to be essentially the same, they are not listed again in detail in these two typologies. The essence of these two typologies are the skills required for organizing clinical care for optimal quality - an assumption which had guided all of the management changes introduced since my appointment.

The significantly new skill of the semi-complex professional mode (typology C) was the ability to organize one's daily work based on explicitly rational criteria to make work as efficient as possible. "Daily work" in physiotherapy consists of organizing one's daily workload which is divided into daily caseload of patients to be treated, plus whatever else it takes to organize one's day (keeping records, making telephone calls etc.) The whole activity is "daily workload".

The three "organizing" skills were included in the typologies C (semi-complex professional) were therefore:

*the ability to generate criteria (knowledge) for the process of prioritizing caseloads and workloads*

*the ability to use those criteria for the process of prioritizing caseloads and workloads (skill)*

A third skill was drawn to my attention by the physiotherapists based on their experience of trying to prioritize their daily work. This was:

*the ability to adjust in a flexible manner the quality of work to be performed in response to the fluctuating demands of the situation*

The physiotherapists thought that this last skill had been one of the most important and most sophisticated skills learnt during a staff crisis. The physiotherapists were now able to "pitch" the quality of physiotherapy work in concert with the demands of the situation without "going into a panic" or "shouting for more staff".

As to long-term (strategic) planning, the following skills were included in typology D as the special skills of the complex professional mode. The physiotherapists were able to list a fair number of skills in great detail, possibly because making the "development plans" had been a taxing, but very enjoyable and invigorating exercise for the most of the staff.

The first two planning skills were:

*the ability to critically question whether physiotherapy services are presently organized most efficiently and effectively*

*the ability to decide how services could be more appropriately organized in the future (setting goals)*

The physiotherapists thought that they had been able to "transfer" the type of analytical and critical thinking used in clinical work to organizing the service. Another "transfer" was assumed to be the ability to think rationally, developed in clinical work, to organizing the physiotherapy service, for which the ability to "provide evidence for one's case" was the hallmark. The skill included in the typology was:

*the ability to provide supporting evidence for agreed-upon goals and proposals for future physiotherapy services*

Other skills listed were:

*the ability to generate criteria for the assessment of present and future needs for physiotherapy services*

*the ability to use these criteria in the assessment of future needs for physiotherapy*

The idea of being able to generate a "vision" which guides the setting up of future physiotherapy service", which I had introduced during development planning, was put forward by the group of physiotherapists as a skill to be included in the typology D:

*the skill to generate a vision of the future of the physiotherapy service*

The physiotherapists had also become aware of the resource implications of planning physiotherapy services. Two skills were identified and included in typology D:

*the ability to assess the resources needed for proposed future physiotherapy services*

*the ability to use new resources for the implementation of future physiotherapy services*

The physiotherapists' "resource-consciousness" had also led to the recognition that it was possible to improve services without any additional resources. This could be achieved by balancing existing resources more prudently through balancing competing demands for improvements. The skills included were therefore:

*the ability to balance competing priorities within a section and between different specialisms of the physiotherapy service*

The physiotherapists had also become aware that implementing what they had planned required additional skills.

The two organizing skills identified were:

*the ability to implement planned change*

*the ability to evaluate change*



In typologies A and B the ability to negotiate with patients and colleagues had been identified as part of the professional mode of being a physiotherapist. The physiotherapists and I felt that this skill was more pronounced in these two roles because of greater awareness of hospital politics which was an aspect of seeing oneself as part of the "hospital universe" and of the NHS. This "world view" was linked to and promoted by the experience of working with physiotherapy colleagues and other professionals in teams. The skill identified for both typologies (C and D) was:

*communication style: the ability to negotiate with physiotherapy colleagues and other professionals*

Summary tables of typologies C and D are shown on the next page.

The next step was to use these physiotherapy-specific typologies of knowledge and skills in local physiotherapy "practice".

## Summary table of knowledge and skills categories

### Typology C (semi-complex professional physiotherapist mode)

All knowledge and skill categories extracted for the basic professional mode apply in this typology, but additional skills are:

*the ability (skill) to generate criteria (knowledge) for the process of prioritising caseloads and workloads*

*the ability (skill) to use those criteria for the process of prioritising caseloads and workloads*

*the ability to adjust in a flexible manner the quality of work to be performed in response to the fluctuating demands of the situation*

*communication style: the ability to negotiate with physiotherapy colleagues and other professionals*

## Summary table of knowledge and skills categories

### Typology D (complex professional physiotherapist mode)

All knowledge and skill categories extracted for the basic professional mode and semi-complex professional mode apply in this typology, but additional skills are:

*the ability to critically question existing whether physiotherapy services are presently organized most efficiently and effectively.*

*the ability to decide how services could be more appropriately organized in the future (setting goals)*

*the ability to provide supporting evidence for agreed-upon proposals for future physiotherapy services*

*the ability to generate criteria for the assessment of present and future needs for physiotherapy services*

## Summary table of knowledge and skills categories

### Typology D (complex professional physiotherapist mode) (contd)

*the ability to use these criteria in the assessment of future needs for physiotherapy*

*the skill to generate a vision of the future of the physiotherapy service*

*the ability to assess the resources needed for proposed future physiotherapy services*

*the ability to use new resources for the implementation of future physiotherapy services*

*the ability to balance competing priorities within a section and between different specialisms of the physiotherapy service*

*the ability to implement planned change*

*the ability to evaluate changes in services based on planning*

*communication style: the ability to negotiate with physiotherapy colleagues and other professionals*

## **CHAPTER NINE**

### **RESULTS: TECHNICIAN PERIOD**

#### **Introduction.**

Data sets about physiotherapy in the technician mode: Data set 1: clinical knowledge and skills underpinning practice in the technician mode - evidence, summary and preliminary discussion.

Data set 2: organizing the physiotherapy service - knowledge and skills underpinning the organization in the technician service - short-term (operational) and long-term (strategic) planning - evidence, summary and preliminary discussion.

Data set 3: absence of team structure to organize staff - evidence, summary and preliminary discussion.

Data set 4: "additional" skills - communication and confidence - evidence, summary and preliminary discussion.

#### **Introduction**

The data about the local physiotherapy service are divided into four major data sets. Three of the four major data sets are subdivided into four specific data sets; The last data set (in chapter twelve) contains three subsets only. The total number of data sets is thus fifteen. The first of the major data sets is about the "technician" period" of the service; the other three are about "professionalism" in physiotherapy.

The data set about "the technician period" (chapter nine) contains four subdivisions which are based on the specific research aims of this part of the study: data set 1 explores the physiotherapists' clinical knowledge and skills used in practice. Data set 2 explores the knowledge skills used to organize the service (operational and strategic planning). Data set 3 explores organizational structure and decision-making. Data set 4 contains "additional data" which emerged from the interviews but had not been part of the original typology A.

The data set about the technician period of the physiotherapy service consists of data about the service at the time of my appointment to district physiotherapist in 1985. Each of the four subsets of data are summarized and briefly discussed at the end of each subset to reach preliminary conclusions, rather than presenting the reader with an continuous stream of fairly abstract data.

Since professionalism is the focus of this study, the main use of the four data sets about the technician period was to contrast and compare the technician mode with the professional type of physiotherapy service described in the other three major data sets.

The three major data sets about professionalism in physiotherapy reflect the three distinct "periods" in the service's development of professionalism which occurred during the four-year period about which data were collected retrospectively.

These periods are referred to as: "Professionalism in Physiotherapy - the Initial Period" (chapter ten; "Professionalism in Physiotherapy - the Middle Period" (chapter eleven) and "Professionalism in Physiotherapy - the Final Stage" (chapter twelve).

Each set of data is in a sense complete in itself, ending in "summaries and preliminary discussions", which are based on evidence recounted largely around "key events".

The "periods" convey my own and the physiotherapists' sense of the service having passed through three distinct episodes in their passage towards professionalism. They are therefore markers in the sense of snapshots (a complete picture), rather than being a statement about the "process" of the services's development, which was not an aim of the empirical study.

Two of the three major data sets about professionalism are subdivided into four subsets and the third set contains three subsets only (a total of eleven). The structure of the subsets about professionalism was based largely on the "key events" (reported by the physiotherapists), rather than the explicit skill-decision structure of the data set about "the technician period".

The reason for the change in structure lay in the abstractness of the data. Reporting the data in a lively and interesting manner required a link to the "real story" and richness of the physiotherapists' working lives - how they use their skills in their clinical work; how they organize their working environment to contribute to their patients; their concerns, stresses and satisfaction with becoming professional people. Analysing the reported key events had shown me that the "story" was the string of events - the key events being the milestones and shorthand description of that story.

Reporting the data based on the service's story was particularly important because this study is practitioner research from a predominantly phenomenologist perspective, whose declared purpose it was to convey the richness of the physiotherapists' working lives. Also, given its intended practical contribution - to devise a model of how to organize work in a

professionalized physiotherapy service - "telling the story" was likely to make my research more interesting to one of my "audiences": practicing physiotherapy clinicians and their managers.

Documentary evidence from the service was used wherever possible to supplement the interview data. My own observations as a researcher and participant observer are included as comments about the interview data.

The number of interviewees increased from fourteen to twenty-one during the "middle-period". Some of the staff interviewed had not been members of the organization during the earlier periods (the "technician" period and the "initial professional" period).

### **Data sets about physiotherapy in the technician mode**

The technician mode in physiotherapy was not the focus of the study and was considered to be largely an operational mode of the past - the real focus being the exploration of the professional mode. The main use of the data about the technician mode was therefore to compare and contrast the technician mode with the other three professional types of physiotherapy.

The data sets about the technician period were based largely on interview data, rather than being supplemented by documentary evidence.

### **Data set 1: clinical knowledge and skills underpinning practice in the technician mode**

#### **Evidence**

All of the fourteen interviewees were aware that the predominant way of doing clinical work had been the technician mode. They identified three major aspects of clinical practice in the technician congruent with typology A:

clinical practice not based on a physiotherapeutic diagnosis and the ability to make such a diagnosis;

the virtual absence of specialism (lack of depth of knowledge);

a narrow framework of knowledge as a point of reference for clinical work.

*The inability to make a physiotherapeutic diagnosis (inability to analyse)*

The physiotherapists tended to express the inability to make a physiotherapeutic diagnosis by saying that their clinical work "had not been based on thinking - it was just a doing-thing". Physiotherapy had not been based on the careful analysis of problems, but the emphasis had been on "doing" i.e. actions not preceded by analysis. The quote below is typical of the physiotherapists' statements and also bears out my own experience of working in technician services - and having been trained initially to work in the technician mode.

"We weren't really thinking. We were carrying out instructions. If you think of chronic obstructive airways disease...it was very much: treat them in side-lying, percussion and vibration, get them to cough it up. That was the basic treatment."...

To clarify the technician mode the respondent contrasted the technician mode with the contemporary professional mode of clinical work.

"Now, because people have looked at what things work and don't work, the patients are assessed - find out what the main problem is...and treat this...We really weren't thinking."...It was just a doing-thing. It's now a thinking job as well. Before, it was just a doing-thing".

The quote above shows that clinical practice was not based on the detailed analysis of the unique problems of individual patients. No physiotherapy diagnosis preceded treatment. And physiotherapy practice is clearly linked in the quote to the physiotherapists' inability to think in the particular way which makes it possible to establish a diagnosis. It is plausible to deduce from this fundamental inability to diagnose physiotherapeutic problems that the physiotherapists were not able to distinguish between medical and physiotherapeutic types of diagnoses (listed in typology A). It would be equally reasonable to assume that the physiotherapists did not possess the skill to "analyse ongoingly" (typology A) and construed the problems of their patients as standard type of problems to be solved by standard type of treatments.

The idea of lack of uniqueness was expressed in the interviews by using the term "basic" (treatment), meaning "standard" type of treatment.

Although the interviewee clearly stated that she considered the type of practice described to have been typical of the whole service, there was one exception: the out-patient

physiotherapy department. The staff of this department, and in particular one senior physiotherapist, were thought to be very highly skilled in manipulating the human spine and joints and were considered to be "more professional".

"I really admire the physios in out-patients. E. is so professional. They know how to spot the problems. Before, we used two types of treatments for backs: back extension exercises and flexion exercises - all prescribed by the doctors. Now it's all different."

Only one interviewee, a newly qualified basic grade (and therefore trained in the professional mode), was able to link the non-analytical approach described above to the physiotherapists' inability to explain "why" something happens (to explain events by reference to theory).

"When I came as a basic grade the seniors were not good at diagnosing problems and what annoyed me was that they could not say why does this happen. They could never explain why they had done something. They didn't seem to have the knowledge or the interest."

Another interviewee, the senior physiotherapist for paediatrics, linked the lack of two analytical components of physiotherapy practice to lack of professionalism. This interviewee had a very clear picture of professionalism in physiotherapy because she had previously worked in a highly professionalised physiotherapy service.

"There was a lack of professionalism in the service...I am sure that geriatrics had the reputation "you can do it without thinking about it". I had in mind the model of an established service I knew. Nottingham was my model. The senior 1 had written an article for the "Physiotherapy Journal"...She had even been sponsored to go to Canada to do some work for POMR...The senior 1 for medical had been one of the first ones to do the M.Sc. in Southampton...It was very undemanding here and I liked it for three weeks before I hated it. It was ghastly, a "morning coffee service"."

The components of practice linked to professionalism were thus: "thinking" - practicing physiotherapy in a reflective mode. And this reflective thinking was then associated with research. All of this represents - in a very indirect way - a link to theory-building being made because theories are built by analyzing professional practice systematically. I was however not certain whether the interviewee had made this link herself.

It was also evident from these statements that the service had its critics - the sternest critics being the newcomers to the service. Yet, in spite of their awareness of the service's



shortcomings no attempt to change matters was made. I discussed this with the interviewee from the paediatric service (quoted above). She told me that although she "had hated it" she felt that she could not leave because of domestic responsibilities.

The basic grade (quoted earlier), who had also been very critical of the service, searched for other jobs but did not leave because the district physiotherapist appointment was made.

*Clinical practice in the generalist mode - the absence of specialism*

The second major component of clinical work in the technician mode, identified by all interviewees, was the low level of specialism of the physiotherapy service. Their considerable awareness of the low number of senior posts was possibly due to the physiotherapists' interest in their careers. Senior posts provide a path for advancing one's career.

The absence or presence of specialisms is related to analytical practice. It is the drive to analyse which pushes knowledge to greater depths. It is a process in which knowledge becomes ever more refined and specific with constant analysis and thus gains depth. This process has been described earlier by reference to Hage and Aiken's (1969) work on organizational change, where the authors had shown how professionals drive knowledge to the level of specialism because of their "insatiable appetite for knowledge".

All of the fourteen interviewees commented on the fact that the service had been "very low in senior structure" and specialist skills. Although their comments tended to be couched in terms of "poor senior structure", links between structure and level of knowledge and skills were made. A typical comment was,

"... there were many more basic grades. There were some senior 2s and hardly any senior 1s. Only out-patients seemed to have people who had good skills".

Documentary evidence and my own investigations of the service at the time of my appointment confirmed the physiotherapists' view. The low level of specialism has already been shown in a diagram of the structure of the local physiotherapy service (1985/6) in chapter one.

This marked absence of specialism was quite surprising because it was not in keeping with the policies governing the profession at that time. The necessity for physiotherapy specialisms had been acknowledged in the NHS' "Whitley Council's Pay and Conditions of

Service 1979". All physiotherapists, with the exception of basic grades (who are classified as "learners"), were expected to be employed as clinical specialists. Hence, a "senior 1 physiotherapist" is designated a clinical specialist doing "highly skilled and specialised work" (Whitley Council Pay and Conditions of Service 1979, para. 2084).

A practice which compounded the local scarcity of senior posts was the deployment of one of the only two senior 1s as a generalist. The senior 1 physiotherapist for the medical wards worked every nine months in a different area of the hospital. This meant that she did not provide a specialist service in spite of having the pay and status of a senior 1 specialist. The physiotherapists' comments were,

"Everybody, apart from the superintendent who was in charge, rotated...nobody had a speciality. But even at that stage...we felt it would be better if people specialised...The only skilled people were in out-patients and it was seen as the only part to be taken seriously...Chest care was lackadaisical and on-call was very simple...It really wasn't right for people with carbondioxyde to be left drowsy."

*Clinical practice without reference to the clinical knowledge of other professions - lack of breadth of knowledge*

The third aspect of clinical work in the technician mode was the physiotherapists' lack of ability to take account of the clinical knowledge of other professionals.

"We seemed to be very narrow in our knowledge. We didn't understand very well what the doctors and nurses did to patients - what their knowledge was."

One of the interviewees gave an excellent illustration of physiotherapy practice which does not take account of medical knowledge.

"Say, chest treatment. They were quite competent in their work but it was extras like biochemistry. There was no expanse out of physiotherapy. Now you find that people will look at what will affect my treatment. So, for example if you have a geriatric patient and he is confused, then why are they confused? For example, in elderly care we didn't use to be aware how for example calcium levels affect the heart rate. So you need to look broader and that wasn't done then, but it's done now".

## Summary

- The data produced good evidence that the overall organizational pattern of using clinical knowledge and skills in physiotherapy practice was consistent with the technician mode (typology A). (These data refer largely to the beginning of the research period in 1985.)
- The only exception to this general pattern was the out-patient physiotherapy service where knowledge and skills were reported to be consistent with the basic professional mode (typology B).
- Aspects of technician type of knowledge and skills were: the physiotherapists' inability to diagnose physiotherapeutic problems.
- It was therefore plausible to speculate that the physiotherapists lacked the knowledge and understanding to distinguish between medical and physiotherapeutic diagnoses.
- It was also unlikely that they possessed the skill to "analyse ongoingly", not having analysed the problem in the first instance.
- Based on the evidence about the lack of ability to diagnose patients' problems it was therefore also reasonable to speculate that patients' problems and the solutions to their problems were construed as standard type of problems/solutions rather than as unique.
- The interviews did not produce direct evidence about the last three items, and these statements have been deduced from direct evidence about the absence of ability to diagnose (analyse).
- The physiotherapy service was not organized as a specialist service, which implied the absence of specialist knowledge and skills (lack of depth of knowledge) and therefore low levels of skills.
- No account of "intuitive thinking" was given in the main interviews. Intuitive thinking had been included in typology A, based on the group interviews.

## Insights and discussion

- The differences in the reporting of "lack of ability to diagnose problems" and to work as a "specialist" (both of which were reported frequently) and the reporting of lack of "breadth of knowledge" (not reported frequently) is possibly a matter of difference in the complexity of the categories. Understanding the expertise of other professions (breadth of knowledge) is more difficult than understanding the specialism of one's own profession and how to diagnose patients' problems. For example, physiotherapists are likely to find biochemical factors which affect the

medical decision for a patient to undergo surgery more difficult to understand than the knowledge and skills used in the various physiotherapy specialisms of their own profession. The reason for this is possibly that all physiotherapists have some basic knowledge and clinical training in all physiotherapy specialisms as students and basic grades.

- Knowledge and understanding of other professions is therefore likely to be reported only by the most reflective and sophisticated members of a profession.
- It was not surprising that documentary evidence about clinical activity was sparse because clinical knowledge and skills are usually not recorded in a way which makes this information easily accessible. Clinical records (patients' records), which do contain the clinical knowledge and skills used in practice, are highly coded messages. To interpret them for the purpose of determining the type of knowledge and skills used in physiotherapy would constitute a major piece of research in itself.
- The pattern of using clinical knowledge and skills in the local physiotherapy service was largely inconsistent with national policies. Since 1977 physiotherapists had the right to determine the nature of physiotherapy treatments and to treat patients without referral under certain conditions specified in DHSS directive HC(77)33. This discrepancy in policy and practice showed the "lag" in the implementation of the policy. Based on my own experience and the experience of my physiotherapy colleagues, this discrepancy did not appear to be at odds with what was considered to be the broad national pattern in physiotherapy at that time.

## **Data set 2: organizing the physiotherapy service - knowledge and skills underpinning the organization in the technician service - short-term (operational) and long-term (strategic) planning**

### **Evidence**

The second set of data about physiotherapy in the technician mode was the account of how the service had been organized at the time of my appointment to district physiotherapist.

All fourteen interviewees reported that the service had not been managed in a proactive way. In their opinion, the "laissez-faire attitude" to clinical work was matched by the same attitude to organizing the service. The following quote describes the service richly using a "railway" metaphor. The account is similar to the impression I formed when I assessed the service as its newly-appointed manager.

"It was just ticking over. It wasn't a very go-getting place...It just "flowed" in its own little way...I mean, there are departments like that. They just run along in their own little backwards-forwards track... We were a reactive department. We had been jogging along for such a long time."

The interviewees were also able to report specific aspects of this lack of planning. There was no short-term (operational) or long-term (strategic) planning. The staff were not organized to produce an efficient service. Both types of planning - or rather their absence - will now be described in detail.

#### *Absence of caseload planning ((short-term (operational planning))*

The physiotherapists said that they did not plan their daily caseloads of patients. The idea of planning had simply never been considered.

"In the olden days you were more or less treating everybody even if you just took them for a walk, which was a waste of time...you were so busy...the tendency was to spread yourself very thinly and try to do everything...We didn't think. We weren't sophisticated enough to think about it as, "Let's cut where it does least damage.."

One exception to this general pattern was reported. The newly appointed senior 1 physiotherapist for out-patients at the district general hospital had re-organized the scheduling of patients (to physiotherapists' lists) in such a way that the amount of time

allocated to each patient was determined by the length of time required to tackle the patient's problem. Before, all patients had been allocated a standard amount of time: "a twenty-minute time-slot".

The two ways of allocating treatment time is the "standard-time-slot" method, which is used in technician systems (typology A). In contrast, professional type of services use a more flexible system whereby time is allocated in response to the unique and individual needs of each patient (typology B).

The main service pattern described above was consistent with the low levels of "organizing skills" listed as the technician mode in typology A.

#### *Absence of long-term (strategic) planning*

All fourteen interviewees reported that there was virtually no long-term planning in any part of the district physiotherapy service either. When service developments were offered to the physiotherapy department, nothing happened as a consequence of the offer. The staff were not consulted about it - even when it directly affected the way in which they did their clinical work.

"At one time we were offered a hydrotherapy pool, which S. didn't even talk about. I think at least we should have talked about it, and it would have stimulated quite a lot of interest and discussion...I think it was a pity it wasn't talked about...It would have changed how the patients were treated...There just didn't seem to be any issues. We were never encouraged to develop at all. It wasn't the right sort of environment...Well, you didn't have anything to do with it. It wasn't your role and you weren't interested in it anyway."

The general service pattern described above was evidence for typology A - "low skill" to plan the future of the physiotherapy services (long-term (strategic) planning).

#### **Summary**

- The data did not provide evidence for the physiotherapy service being organized in any purposeful manner. Any organization seemed to be accidental rather than being planned.
- Lack of planning and the absence of the knowledge and skills commensurate with the practice of planning were noted for two aspects of planning: short-term (operational) and long-term (strategic) planning.

- Nevertheless, a technician physiotherapist tackling her daily caseload of patients is likely to have planned her working day in some intuitive way. (This type of intuitive planning had been distinguished from planning work based on quality criteria ("rationally" - typology B).

## **Insights and discussion**

- Given the national policy context of the period to which these data relate (1985), this lack of purposeful organization is likely to have been a local deficiency rather than the more general pattern in physiotherapy. The reason for this is that superintendent physiotherapists had been the first-line managers of physiotherapy services for much of the history of the profession. It seems therefore likely that the profession had, collectively, developed some first-line management skills. This speculation is also based on my own experience of having worked in many physiotherapy departments during my career as a clinician. This was confirmed by my physiotherapy colleagues who felt that some physiotherapy departments "were efficient"; others functioned in the manner described in the interviews.
- Nevertheless, the data also need to be seen in the context of the general absence of a management ethos in the NHS of that time (in 1985).
- Long-term (strategic) planning in the hands of physiotherapists was certainly new to the physiotherapy profession. Many district physiotherapists were only appointed during the mid-eighties, which meant that the physiotherapy professions lacked the collective experience of planning future physiotherapy practice at district health authority level.

### **Data set 3: absence of team structure to organise staff**

#### **Evidence**

The inefficient deployment of senior physiotherapists had already been discussed in the section on "lack of specialism", where the low ratio of senior 1 specialist posts to senior 2 and basic grade staff had been noted. In addition, one of the only senior 1 specialists had been employed as a generalist. The physiotherapy staff was not used to optimal effect.

More evidence about the inefficient use of staff came to light because all interviewees reported that the service had lacked "any kind of systems through which work was organized to best effect". The staff "did not work in teams". The following quote is typical of the account given by the physiotherapists.

"We were not organised in teams...and so we were very isolated and felt very isolated."

All fourteen interviewees linked the absence of teams to being isolated. In turn, this was linked to the low status of the service.

"Well, we all felt very isolated... in the hospital. In the medical ward you were really an interloper, coming in and not completely seen as a member of the team... We weren't appreciated."

The low esteem in which others held the physiotherapists appeared to have affected the physiotherapists' self-esteem.

"....and you wondered how important was what you did...And sometimes it was difficult to convince yourself that it was important and worthwhile, and whether you were doing any good."

The absence of teams was also linked to lack of communication amongst the physiotherapists. Communication was seen as a "support" mechanism when clinical decisions were difficult to make. Talking to other clinicians seemed to ease the burden of clinical responsibilities.

"It made you feel in need of colleagues that are there with you all the time...I think you need someone to bounce off ideas. It can make you feel very isolated when you haven't got



the support of your peer group. Everything has got to be done by you. It's just up to you and that's hard."

One physiotherapist, who later became the superintendent physiotherapist for the elderly-care service, thought that the absence of team support had been particularly "frightening" for the basic grades.

"I think it's hard for a basic grade to come in and be stranded all by themselves in a ward. It's frightening for the basic grades, in particular for the modern ones who haven't had much experience...and sometimes the Sisters aren't very nice, narking doctors and consultants. So I think they need a back-up for the start."

The physiotherapists' sense of isolation was particularly marked in the community setting where only one physiotherapist might work in a specific location, such as a school for mentally handicapped children. The next quote portrays the sense of isolation suffered by the physiotherapists in this setting.

"I felt very isolated. I sometimes used to phone the other physiotherapists working in paediatrics - just to chat. It was no good phoning the other physios because they didn't know who I was.." "I didn't have any contact with my manager. I mean my manager would never look round the school. So he wouldn't have understood my problems. If I had problems he wouldn't have been able to visualise what the problems were".

One of the consequences of lack of support from managers and colleagues seems to have been interprofessional strife. There had already been a hint of this in an earlier excerpt because the physiotherapists working at the district general hospital said that they had "felt like interlopers on the wards".

The most serious interprofessional conflict had occurred in the paediatric service where a senior physiotherapist and the headmistress of a school for handicapped children had been in such severe conflict that the local education authority urged me to dismiss the physiotherapist.

## Summary

- The interviews showed that the physiotherapists had become aware of the disadvantages of not working in a physiotherapy service which has a specialist team structure.

- Although many of the possible functions of specialist teams were not identified in this part of the report, seven distinct disadvantages were associated with lack of team structure.
- The first was: actually "being isolated" because each physiotherapist worked alone.
- Working alone was linked to a "sense of isolation".
- Professional isolation was associated with "low status" of the local physiotherapy service, which, in turn, was associated with "not being appreciated" (valued) by other professionals attending to the same patients.
- Professional isolation and the perceived low status of the local physiotherapy service reduced the physiotherapists' self-esteem.
- Professional isolation was also associated with "lack of support from colleagues".
- Professional isolation was also associated with the absence of opportunities to communicate with one's peers.
- Lack of support from managers was linked to the existence of interprofessional strife in a seemingly hostile hospital environment.
- The seven disadvantages associated with lack of team structure were the same as those discussed earlier in chapter two (decision-making pilot), where the links between organizational structure and decision-making had been discussed.
- The pattern of perceived deficiencies associated with lack of team structure fitted into the mechanistic patterns described by Lickert (1967) discussed in chapter two.
- In Hage and Aiken's research (1967) these patterns of organizing decision-making were associated with the presence of low levels of knowledge and skills (low complexity) in axiomatic theory.

## **Insights and discussion**

None in addition to above comments at this stage.

## Data set 4: "additional" skills - communication and confidence

### Evidence

Two "additional" skills (skill deficiencies in the technician system) were discussed in the in-depth interviews. These skills are "additional" in the sense that they seemed different types of categories in comparison with the "fundamentally intellectual" skills cited in the literature. Communication had not been mentioned in the literature as a possible professional skill until 1990 where it was confined to dialogue ("discourse") between professionals (Svensson). Confidence seemed an altogether different and more "personal" skill.

#### *Lack of communication*

During the group interviews with the physiotherapists two types of communication skills had already been identified. "Instructing" was associated with the technician mode of physiotherapy (included in typology A). The ability to "negotiate" with patients, physiotherapy colleagues and other professionals had been categorized as a professional style.

In the in-depth interviews the two different communication styles were portrayed as a very significant difference between physiotherapists who work as technicians and professionals. The following quote from the in-depth interviews was reported as typical of the pattern of communication used between patients and therapists who function as technicians.

"What we used to do was, telling the patients what to do. You informed them...there was no dialogue. It was very dogmatic. You didn't really listen to patients. Patients had to fit in with you ...and there was only one model, one type of rigid sort of treatment".

The quote also showed that the interviewees understood the link between this type of communication and the standardized forms of treatments. Standard treatments require patients to be instructed in standard sets of exercises. However, once treatments become professional, they are tailored to the individual needs of patients in which communication with the patient plays a key role. Conversation is necessary to elicit the patient's responses, in order to constantly adjust the treatment to the patient's changing condition.

The physiotherapist were also aware that this form of communication with patients "spilled over" into how physiotherapists spoke to colleagues and other staff.

"Physiotherapists weren't really very skilled in negotiating with other physios, or the doctors, or the nurses. It often led to trouble. There was "no give and take". Come to think of it, we tried to speak to them like patients. Physios have a bit of a reputation for being a bit harsh - like some nurses. We weren't very responsible."

Lack of interprofessional communication by the leader of the physiotherapy service was associated with the low status of the service.

"S., the former superintendent, was maybe tired and she didn't want to work any more...The service needed to be considered as a whole...We had no central point or person who drew us together. We never spoke with one voice on anything to outsiders...we didn't present professional attitudes when we wanted things. This is what earns the respect...It was difficult to carry authority...No wonder we didn't have the respect of the doctors and nurses".

This meant that the amount and quality of communication about the physiotherapy service was minimal. The reason for this was possibly because the superintendent physiotherapist and other leaders of the service lacked the knowledge and skills to engage in dialogue with other professionals about physiotherapy.

However, we do not know from the data whether the leaders of the physiotherapy service would have communicated in the pattern typical of technicians. Nevertheless, an earlier quote about communication with colleagues and other staff makes one suspect that their style did not differ from the one described as the service pattern.

"Physiotherapists weren't really very skilled in negotiating with other physios, or the doctors, or the nurses. It often led to trouble..."

#### *Lack of confidence*

Earlier evidence had shown that the physiotherapists did not feel confident because they said that they "felt like interlopers on the wards." A confident professional whose role it is to provide clinical services usually does not feel like an "interloper" in the area in which (s)he is expected to work. Their lack of confidence was also expressed more directly.

"We weren't very confident at all. It was all a bit frightening and some of the treatments I gave were kind of...It can't do much harm... We were always asking for permission from the consultants to go ahead with things".

The quote also illustrates two types of actions which are linked with lack of confidence: "playing it safe" i.e. providing a treatment which is safe but is not necessarily the most useful form of treatment, and avoiding responsibility by asking permission from other people. In this instance permission was sought from doctors who are not trained or qualified in physiotherapy.

Another aspect of lack of confidence was the inability to consult with colleagues when the physiotherapists doubted their own competence.

"When you are not very confident it's very difficult to ask people you are working with for help. You are not sure about it. I used to lack that confidence."

Lack of confidence had not been cited as an aspect of typology A during the pilot interviews.

## **Summary**

### **Communication**

- The organization's predominant communication style was identified as "issuing instructions" to patients, colleagues and other professionals.
- Style of communication (instructing) and type of treatment (in standard form) were linked in as far as the communication style was held to be the appropriate form of communication for treating patients in the technician mode.
- The service leaders were also likely to have followed the predominant pattern of communication. The communication style adopted in the clinical sphere is likely to have been followed in the management arena.

### **Confidence**

- Physiotherapists lacked the professional confidence to provide physiotherapy treatments without consulting with medical staff, which is consistent with the rights and duties of technician physiotherapists outlined in national policies.

- A strategy for coping with lack of confidence was to provide treatments which were safe, but not necessarily the most appropriate form of treatment. This contravenes the ethical code of professional practice under which professionals are expected "to do what is best" for the patient.
- Lack of confidence was linked to lack of communication because the physiotherapists did not have the confidence to request help from colleagues.

### **Insights and discussion**

- The interpretation of the data raised the question whether communication skills and confidence (a skill) were a special aspect of the repertoire of skills typical of professional work.
- The literature about the special skills of professionals dwells on intellectual skills, in particular when it comes to solving technical (clinical) problems.
- Nevertheless, some professions now consider good communication skills to be critical in professional practice. For example, the medical profession now includes training in communication in its undergraduate clinical training. However, physiotherapy training has always emphasized to a greater extent the behavioural aspects of treating patients. This is so because physiotherapy requires greater co-operation from the patient in comparison with many medical procedures.
- This may imply a widening of professional skills from purely intellectual skills to a wider range of skills needed to apply knowledge and skills in professional practice.
- The greater emphasis on communicating with patients may also reflect the growth in more holistic models of health care in which patients are seen as "beings" rather than a physical entity seen from the perspective of the machine metaphor.

## CHAPTER TEN

### RESULTS: PROFESSIONALISM IN PHYSIOTHERAPY - THE INITIAL PERIOD

Data sets about professional physiotherapy practice:

Data set 5: the district physiotherapist appointment and complex professional knowledge and skills - evidence, summary and preliminary discussion.

Data set 6: (a): development planning ((long-term (strategic) planning)) and "complex" professional knowledge and skills - evidence, summary and preliminary discussion.

Data set 6: (b): development planning ((long-term (strategic) planning)) and "complex" professional knowledge and skills - evidence, summary and preliminary discussion.

Concluding discussion of data sets about "complex" professional knowledge and skills.

Data set 7: the implementation of the district-wide education program and "basic" professional knowledge and skills knowledge and skills in physiotherapy - evidence, summary and preliminary discussion.

Data set 8: the implementation of a specialist structure and "complex" professional knowledge and skills - evidence, summary and preliminary discussion.

#### Introduction

The data sets about professionalism in physiotherapy practice are divided into three chapters by "period": "initial period" at the time of my appointment; the "middle period" and the "final stage" of the investigation of local physiotherapy practice, as outlined at the beginning of chapter nine.

This data set about the "initial period" in the service's development is divided into four main data sets, with each of the four sets being structured around a "key event" (or critical incident). Wherever possible the data sets (which were based mainly on in-depth interviews), are supplemented by documentary evidence.

All fourteen interviewees reported four initial organizational changes ("key events"), which were largely associated with the type of knowledge and skills listed in typology D (complex professional mode). There was agreement that these initial changes had been:

- 1) the appointment of the district physiotherapist,
- 2) the production of development plans,

- 3) the implementation of an education and training system
- 4) and the implementation of a more senior staff structure in the physiotherapy service.

The knowledge and skills developed in association with a particular key event are discussed in the order in which the four key events were listed.



## **Data set 5: the district physiotherapist appointment and complex professional knowledge and skills**

### **Evidence**

All fourteen interviewees told me that the service had been "in a state of waiting" before my appointment. Any changes due to the appointment were therefore eagerly anticipated, whilst at the same time being feared.

As to the service being "in a state of waiting", the health authority had postponed this appointment for two years and all changes relating to physiotherapy had been kept in abeyance, which had led to frustration. The physiotherapists' frustration was conveyed powerfully by the physiotherapist who had been "acting up" to superintendent physiotherapist at the district general hospital.

"...when I was in charge - I was only acting up - ... they told me that they were waiting for you. When the district physiotherapist comes ..." - that was what I got all the time. So, nobody was backing me up in anything..." The staff felt we were just waiting, waiting, waiting...."

Consequently, all interviewees felt that the service had been neglected for many years and that change had been long overdue. But in spite of being frustrated with waiting, the staff also felt very ambiguous when I made the first changes. The physiotherapist who was eventually appointed to the superintendent post at the district general hospital described the staff's attitudes to these first changes in the following way.

"I can remember the process then. You interviewed all the staff and we started to look at how the service could be changed. We started thinking about the development plans and training system and then my own appointment. The development plans were quite new and I can remember being in the middle of it. On the one hand people thought it was a very good idea and some - mainly the part-timers - thought it was a lot of rubbish. They didn't want to have anything to do with it...it may have gone over the heads of some of the staff. So, there was this transitional period where people knew that change was coming and didn't know whether to go with it and throw themselves into it, or whether to be very suspicious. They had been "trundling" along for such a long time..."

The ambiguity voiced by the staff at the district general hospital was mirrored by the staff working in the community setting. For example, three physiotherapists from the paediatric service were very reluctant to attend the weekly education program.

"Initially we felt under pressure to go to the Monday meetings...and we sorted that out...we could only go to those ones which were relevant...and then we could look at it differently".

The physiotherapists were able to overcome their reluctance to attend because I reached a compromise with them by giving them permission to attend only those lectures which were relevant to their work. This made them feel that they were no longer "under pressure", and because of this they "could look at it differently".

The second part of the quote (set out below) does however tell the real story. The physiotherapists considered themselves to be "free agents" and were reluctant to accept anyone as their manager.

"...we had been here out on a limb with no one interfering. We got used to doing things the way we wanted to. Up to a point that was fine. We felt pressurised to become involved..."

Nevertheless, another section of the paediatric service welcomed the fact that "change had come at last" because it addressed one of the physiotherapist's key problems: professional isolation. She had always wanted contact with other physiotherapists and with a manager, but this had not happened.

"Your appointment was the "end of isolation" - one of my key points. I felt terribly isolated and unappreciated - I suppose - by the physiotherapists, not by the staff at the school. You see, I had no contact with hospital physiotherapists. In fact I didn't know any at that stage... I didn't have contact with my manager either...The change started initially because you came - you came to see what I was doing and why I was doing it, which made me have to think clearly about our longer-term goals - ...I had to justify what I was doing to a fellow professional who knew what I was talking about..."

The physiotherapist's account shows that a change in thinking had already taken place. Because I visited the service shortly after my appointment, the physiotherapist began to think about the "longer-term goals" of the service. She began to think in terms of the development planning proposed by me some months later. Similarly, analytical thinking

about planning appears to have been initiated simply because the physiotherapist felt that she had to "justify what she was doing to a fellow professional".

The extent to which this account was usual of the physiotherapists' behaviour is however not clear. Nevertheless, all of the skills referred to in the quote were eventually acquired by the entire staff through the development planning.

### **Summary**

- The interviews about the first critical incident - the district physiotherapist appointment - yielded data which were of very limited usefulness only.
- Only one respondent reported some change to a complex professional level of skills as a direct result of the appointment. The physiotherapist began to set "longer-term goals" for the service, thereby anticipating in some sense the development planning project proposed by me later.
- At the same time, the physiotherapist's analytical thinking about planning appears to have been stimulated because she felt that she had to justify her actions to another professional.
- It was noted at this point that typically of the stage at which organizational change is initiated, the staff were ambiguous about the forthcoming changes: welcoming change and at the same time being in fear of organizational change.

### **Insights and discussion**

None at this stage.

## **Data set 6 (a): development planning ((long-term (strategic) planning)) and "complex" professional knowledge skills**

### **Evidence from interviews**

Making of the development plans has already been described in chapter one of this thesis, where the focus of my inquiry was the development of an organizational structure which might support the physiotherapists in their planning task. Now the main focus of research was the analysis of the physiotherapists' knowledge and skills, decision-making and organizational structure.

All fourteen interviewees agreed that the physiotherapists' skills had changed throughout the entire service because they developed the ability to plan physiotherapy services. One of the interviewees, the senior paediatric physiotherapist, summarised these skills in the following way. Her remarks were typical of what was reported by the other respondents.

"There were quite a lot of skills we had to learn... Actually doing the development plans was actually having to set down your thoughts in a fairly structured way...sifting through and deciding on major goals and isolating them...forecasting what could be achieved, what should be achieved if things were more favourable - not just staffing but all other things. And sort of..instead of a general complaint about lack of facilities and lack of staff, it was more itemising the areas where the greatest shortcomings were and deciding where...our priorities lay. It was taking a wider-term look."

The list of planning skills identified by the interviewee were therefore: goal-setting ("sifting through and deciding on major goals"), which amounts to prioritizing goals. This was followed by considering the resources necessary for the implementation of any goals. In turn, this was linked to a more positive and proactive attitude as the physiotherapists' responsibilities for planning the service increased.

Finally, the skill identified in the first part of the excerpt was to produce a written plan ("actually having to set down your thoughts in a fairly structured way").

It is not clear from this account whether the staff had a sense of the service being in need of major change, or whether they took part in development planning because I had asked them to do so. The first option would indicate a greater degree of professionalism because the ability to critically examine practice and to diagnose problems is fundamental to professional work. Earlier evidence from the technician physiotherapy service supports the

"more professional" option that the staff had been aware that the service was in need of improvement.

All of the skills outlined could have been acquired in a relatively passive way i.e. by following the blueprint which I had presented to them during the education sessions. However, the physiotherapists did more than this. Whilst being engaged in the process of development planning they reflected upon "other skills" which needed to be developed.

The first skill identified by the physiotherapists was the ability to "overview" i.e. to consider one's work in the context of the entire service. The quote below is typical of the physiotherapists' account of these skills.

"...it made us take a wider look...It taught you to look wide... rather than just day to day...I existed on treating my patients on a day-to-day basis - on their immediate needs. We never progressed beyond that...We had to think about the whole service."

The skill identified here was "greater breadth" of knowledge and its use in thinking about physiotherapeutic problems. It seems that the therapist's universe had changed from the narrow reference point of "the patient and I" to include all other patients being treated in the specialist service, and even the whole physiotherapy service.

A second skill was identified: the ability to "distance oneself" from one's work, which was seen as an aspect of the ability to "overview". This was linked to the idea of objectivity by one of the respondents.

"So we had to step back several paces from what we were doing and view it in an overall way...We were trying to look at it as you would as a manager coming in from the outside...as an overall job...You had to be more objective - see the whole service and your service in it in a more objective way."

A good example of this type of thinking and of its practical advantages was the paediatric service. This service consisted of three physiotherapy specialisms: a physiotherapy service for acutely ill children at the district general hospital, community physiotherapy for physically handicapped children located at number of specialist schools, and services for mentally handicapped children, also located at various specialist schools. Initially, each of the three specialist services had made a development plan for the particular specialism, but as soon as a superintendent physiotherapist for the whole of the paediatric service was appointed, the three plans were merged into one at the request of the physiotherapists.

The reason for this was the realization that the key problem in paediatrics was its lack of co-ordination of specialisms.

The physiotherapists also realized that making an overall plan required skills which were different to those involved in planning for one section only. One skill identified was the ability to "produce ideas" i.e. the ability to move to more abstract and conceptual levels, rather than to rely on facts. The report below is an excerpt from the interview with the deputy superintendent physiotherapist of the paediatric service. It is typical of the rest of the interviews with physiotherapists working in the paediatric specialism.

"...it was really gathering the three development plans... making a more overall plan for the whole service... my initial plan had been about one specific service and I was the only person involved in it ...it was a personal thing and it was also very grassroots because it was a basic plan...I had been very narrow. I had only been thinking about my own narrow problem. To make the plan for the whole service we had to be thinking differently - more abstract, rather than just looking at facts. It was a very different type of thinking...We had never done this before. It was new."

The realization that making a more comprehensive development plan required additional skills was also reported by other specialisms. The next excerpt, which was typical of the accounts from the physiotherapists working with elderly patients, is a report by the superintendent physiotherapist.

"Making the plan for the whole service was much more difficult than making it for my little area - more abstract less facts. When it came to making the overall plan, which included D.'s elderly care section, you had to think differently. We had to think what we had in common - not so factual. It seemed you had to ignore the differences and try to think wider. In the end, the plan sounded more like the plans we get from Region [the regional health authority]."

At the district general hospital site, all physiotherapy specialisms had to combine their plans to make a development plan for the site in order to co-ordinate services. Some specialisms also had to link their plans to specialisms outside the district general hospital site. The next excerpt is an account of co-ordinating clinical services on a district-wide basis via development planning.

"Out-patients made a plan with the physios at BRHC [a health centre thirty miles from the out-patient department at the district general hospital] and St. M. [an out-patient

department at a hospital specializing in the care of elderly patients]. It wasn't so difficult to combine with BRHC because there were a lot of similarities. But St. M., where they treat quite a lot of elderly patients - we had some old people too - for that we needed to think differently. For example, we had to consider timing much more. We have worked for a long with flexible timing in out-patients - not in twenty-minute slots. But there you had to think for how long you would do hands-on treatment but also leave the patients in the department to get on with their exercises by themselves - supervised by keeping an eye on them. Old people also get tired and need a rest. So you have to work around rest periods. We hadn't thought of it in such detail before - and also in this more general way - how it works for different groups of patients, and how you can work round it by being flexible and organized".

The excerpt also provides evidence for a new and significant skill. This skill was the "ability to generalise", that is, to abstract common elements in the face of differences. Although physiotherapists who have been trained in the professional mode are taught this type of thinking in relation to clinical care, this skill is not explicitly taught when it comes to organizing and planning the environment to clinical care. However, here was evidence of this skill being developed spontaneously in the non-clinical domain of physiotherapy work.

A second skill contained in the data was reflective thinking. The physiotherapists were quite evidently reflecting intensively on what they were doing: what worked; what did not work; which extra knowledge and skills were needed to produce good development plans and a good physiotherapy service. To use Schon's term (1983), the physiotherapists were "reflecting on action" whilst being in action.

## **Data set 6 (b): development planning ((long-term (strategic) planning)) and "complex" professional knowledge skills**

### **Evidence from documentary sources**

The development plans were examined because as a manager I knew that some types of knowledge and skills, which had not surfaced as data during the interviews, could be deduced from the development plans as documents.

The examination of these documents showed that the physiotherapists' evidence-gathering skills, which centered on "hard facts" (such as gathering statistics) (appendix C) had not been reported during the interviews. They were however contained in the documents. One such skill category was: "the ability to provide supporting evidence for agreed-upon goals and proposals for future physiotherapy services". This category deals broadly speaking with having valid reasons and "hard evidence" for doing something.

All development plans contained statistical evidence ("hard facts") about present and past physiotherapy services. Several formats for numerical data collection and other statistics for assessing services had been suggested in the model for the development plans (appendix D). This is why for example the "M.S. Out-patient Policy" contained a great deal of "hard facts" and evidence about gathering these facts in a systematic manner. It is worthwhile outlining this here in some detail because it provides good evidence for the quality of the local physiotherapists' skill.

In the "M.S. policy" the overall "purpose" was defined as: "to improve and further develop an out-patient service available for all M.S. sufferers within our area, whatever level of disability". This statement of purpose was then linked to eleven "faults" of the present service and followed by concrete proposals to remedy these faults. The first "fault" listed was: "no permanent member of staff and not enough [staff] involved in order to expand the service", which is followed in the plan by "corrective measures". One such measure is: the "recruitment of more staff or re-organisation of those available..." The number of staff hours presently used for treating M.S. sufferers were calculated and proposals for adequate staffing levels were proposed.

The plan continues its thorough evidence-gathering approach in its outline of "monitoring" where the number of M.S. patients "on register" in the health district (25 M.S. sufferers) and numbers registered by the "M. S. Society" (140 M.S. sufferers) are listed, in order to match the needs of patients to the staff time. Elsewhere in the "faults" section it is stated



that "only 1/6th of M.S. sufferers are "involved in the facilities of the physiotherapy service".

The development plan documents also provided evidence for two other category in typology D. These were: "the ability to critically question" whether existing physiotherapy services are presently organized in the most efficient and effective manner, and "the ability to generate criteria for the assessment of present and future needs for physiotherapy services".

For example, the "Stroke Care Policy" contained ten criteria for defining "high quality" in the "rehabilitation of stroke patients". One of them was to "decide priorities for individual patients". This was backed in the "To-Do" section by the "assessment of staff skills" and how to increase staff skills because priorities can only be decided by staff who are sufficiently highly skilled.

The assessment of existing skills was again taken up in the "Methods and Data Requirement" section where the need to assess the staff's "previous experience" and [to appraise] the application of skills" were listed. This was followed by a number of recommendations which might increase skills: "to encourage attendance of courses"; "staff training at work" and "to set specific standards to be achieved by each physiotherapist".

Two skill categories, which had also not been reported in the interviews, were about "resources": "the ability to assess the resources needed for future services", and "the ability to use new resources for the implementation of physiotherapy services".

We had already seen in the "M.S. Out-patient Policy" that the number of staff required for the new and improved specialist service had been calculated in the plan. The same policy considered "access to [other] specialised staff" ("doctors, psychiatrist, nutritionalist and counsellor") as the additional resources required for the new and improved service.

Evidence for the second of the two resource categories ("using new resources in the implementation of physiotherapy services") came to light from examining the "succession" of development plans - produced spontaneously in the specialist sections. The analysis of these plans showed that the new staff who had been appointed from new finance (granted on the basis of the first development plan) produced a second development plan.

A good example of this was the paediatric service where a senior physiotherapist (newly-appointed from additional funds) made a new development plan for the section to which

she had been appointed. On the basis of this new development plan it was decided to use a percentage of the physiotherapists's time for an entirely new service and formerly unplanned service which was dedicated to "clumsy children".

Other specialisms also evaluated the initial changes which they had made on the basis of the first development plan periodically. For example, the "Updated Development Plan for In-patient and Out-patient Medical Rehabilitation showed that although the new development plan continued some of the earlier aims ("To provide a high standard of physiotherapy treatment"), it also contained new goals, which reflected the changed reality of the service. Two of its new aims were: "To restore and rebuild the medical rehabilitation service in its new location...; To investigate the use of video" etc.

Finally, the last category of typology D for which it had not been possible to get primary evidence from the interviewees was: "ability to generate a vision of the future for the physiotherapy service". The initial development planning model (appendix E) showed that developing a vision had been proposed in the statement of "purpose - overall goal", which is defined in the model as "philosophical concept - [pertaining to] "values". These values (or vision) were defined in the plan as "general" and "vague, and distinguished from "specific goals" which were said to "limited in time and space".

My examination of the development plans showed that the physiotherapists' vision statements were pitched at a fairly concrete level. Most vision statements referred to "standards", preceded by adjectives like: "excellent" "high" or "appropriate". Other versions of overall purpose referred directly to the nature of services, such as an "extensive rehabilitation program"; "accessible" or "comprehensive service" or a "full physiotherapy service to cover all aspects of patient care". Only one of the plans defined the purpose of the service in terms of clinical goals: "To provide a physiotherapy service to the multiple handicapped that enables every individual to attain and maintain their physical potential".

Given the complexity - and importance - of the evidence of the "complex" professional knowledge and skills of physiotherapy practice, two "summaries and preliminary discussions of data sets" will follow this section about "evidence". One will summarise the evidence from the interviews; the other will be based on the documentary evidence. The two types of evidence will be linked in a "concluding discussion" about these "complex" professional skills.

## Summary

- The interviews provided evidence about the following categories only.
- The ability produce a development plan for a specialist physiotherapy service based on the knowledge and skill to:
  - set service goals, - prioritise competing goals.
- The ability to gain an overview over an entire service (breadth of knowledge) in order to plan one's work in the context of the whole specialist section or entire physiotherapy service.
- The ability to distance oneself from the immediate task in hand in order to gain an overview.
- The ability to generalise from specific to common elements in planning.
- The ability to use reflective thinking in one's work ("reflection-on-action" and "reflection-in-action").
- The ability to negotiate the contents of a development plan within a specialist team or a network of specialist teams.

## Insights and preliminary discussion

- The ability to "prioritise between competing goals", which had not been included in typology D as a separate category, was considered to be an aspect of the process of goal-setting. It was therefore included in this typology.
- The ability to "overview" i.e. to place one's work in the context of the whole of the service seemed a particularly sophisticated skill. Based on my own extensive experience as a planner, a frequent planning problem is lack of co-ordination because of lack of understanding of the "co-ordinated whole". This may be based on the inability to view the particular in the context of the whole, but may also be a result of the political interests distorting the process of planning. Because the ability to overview had not been included in typology D it was now added.
- The ability to distance oneself in order to gain an overview was possibly an aspect of overviewing and was therefore included as part of the process of overviewing.
- The ability to generalise from the specific to common elements in planning was also included in typology D as an important intellectual skill.
- This ability to generalise had been described in the literature about professional knowledge systems as a fundamental professional skill. However, in the literature it had been confined to the technical task of professional work only.
- Reflection-in-action and reflection-on-action had also not been included in typologies D. The reason for this had been that these categories did not emerge

during the group interviews, in spite of being contained in the literature review of professional knowledge systems. However, a more general category: the ability to "analyze ongoingly" (which does not distinguish between reflection-on-action and reflection-in-action) had been included in typology D.

- Nevertheless, in the literature about professional knowledge systems, analyzing ongoingly seems to be confined to the "technical" tasks of professional work. "Technical" in physiotherapy means "clinical" work. The ability to analyse ongoingly had therefore been included in typology B which refers to the professional knowledge and skills used in clinical (technical) work only. However, these interview data showed that reflective thinking was used in the non-technical domain also - in the organization of the context to clinical work. Using reflective thinking in the non-clinical sphere was therefore now included in typology D.
- The interviews did not provide evidence for a number of categories contained in typology D, which were researched using documentary evidence contained in the development plans.

## Summary

- The data categories extracted from documentary sources were skill categories which dealt with "hard facts" used in planning, for which the development plans proved to be excellent data sources.
- The first category was the ability to provide supporting evidence for agreed-upon proposals for future physiotherapy services; - the ability to generate criteria for the assessment of present and future needs for physiotherapy services;
- the ability to use these criteria in the assessment of future needs for physiotherapy services;
- the ability to assess the resources needed for proposed future physiotherapy services;
- the ability to use new resources for the implementation of future physiotherapy services;
- the ability to evaluate changes in services based on planning;
- the ability to implement planned change.
- The only "soft" category extracted from the documents was the skill to generate a vision of the future of the physiotherapy service.
- The vision statements contained in the development plans were pitched at a fairly concrete level.
- The development plans contained a variety of vision statements.
- All of the categories extracted from documents were aspects of typology D.

## **Insights and preliminary discussion**

None, except that no new categories emerged from the examination of documentary evidence.

## **Concluding discussion of data sets about "complex" professional knowledge and skills in physiotherapy**

- The two data sources (interviews and documents) provided good evidence for the entire range of complex professional knowledge and skills listed in category D.
- No evidence disconfirming typology D came to light.
- New types of knowledge and skills emerged from the interview data. They were added to typology D because they seemed to be significant elements of physiotherapy practice. The significance of these new categories to professional practice was to be evaluated once all data had been interpreted.
- The new skills were: the ability to overview (breadth of knowledge) in order to place one's work in the context of the whole section or entire service. This included the ability to distance oneself from one's work in order to gain an overview; the ability to generalise from the specific to common elements in planning; the ability to use reflective thinking in organizing the service.
- The main contribution of these data to professionalism theory seemed to be the use of the analytical approach in the "non-technical sphere" of physiotherapy i.e. outside the profession's technical domain. In the literature about professional knowledge and skill systems the analytical approach was listed in relation to the "technical" domain of a profession only.
- Although the focus of this study is not how the local physiotherapy service became professionalized, the process of how the analytical approach to managing physiotherapy had been adopted was kept in mind at this stage. A model for making the development plans had been given to the staff, on the basis of which the physiotherapists' new analytical skills were developed during the process of planning. -The data provided evidence for the development and use of a fairly sophisticated range management concepts. An example of this were the generation and use of quality criteria.
- From the perspective of the actor-based framework, which is part of the overall perspective of professionalism, the development of management knowledge and skills represents the growth of "knowledge about" the intricacies and procedures of the profession. As discussed earlier, Burrage (1990) considered this type of knowledge to be an immense source of power for the professions.

- The development of management knowledge and skills also represents a considerable expansion of the decision-making scope (autonomy) of clinicians.
- This practice also meant that the practitioners who were most experienced and knowledgeable, were able to use their clinical expertise as an input into managing and organizing the physiotherapy service.
- The pilot interviews had shown that the superintendents retained the co-ordinating role in planning. The district physiotherapists retained overall responsibility for resource allocation on a district-wide basis, and was also responsible for negotiating new resources with the district health authority.
- From the perspective of axiomatic theory and the question of organizational structures, development planning represents de-centralization of decision-making to the middle stratum of the organization, and thus also a move towards a more organic type of system.
- This de-centralisation of decision-making was associated with an expansion of knowledge and skills because management skills were added to the physiotherapists' repertoire of technical (clinical) skills. This mirrors the association of the decision-making and knowledge variables of axiomatic theory - "The higher complexity, the lower centralisation" (Hage and Aiken 1967).
- The data also provided evidence for "tighter" organization within the service which was associated with development planning. Functions were allocated to the specialist teams. From the perspective of the actor-based framework "organisation" is listed as one of the key resources used by professions to promote their interests, such as professional autonomy. It will be shown later that this proved to be a decisive factor in local conflicts with the medical profession.

## Revised typology D (complex professional physiotherapist mode)

### Summary table of knowledge and skills categories

All knowledge and skill categories extracted for the basic professional mode and semi-complex professional mode apply in this typology, but additional skills are:

*the ability to critically question existing whether physiotherapy services are presently organized most efficiently and effectively*

*the ability to decide how services could be more appropriately organized in the future (setting goals), including the ability to prioritise between competing goals. (The last skill is an addition to the original typology D).*

*the ability to provide supporting evidence for agreed-upon proposals for future physiotherapy services*

*the ability to generate criteria for the assessment of present and future needs for physiotherapy services*

*the ability to use these criteria in the assessment of future needs for physiotherapy services*

*the skill to generate a vision of the future of the physiotherapy service*

*the ability to assess the resources needed for proposed future physiotherapy services*

*the ability to use new resources for the implementation of future physiotherapy services*

*the ability to balance competing priorities within a section and between different specialisms of the physiotherapy service*

*the ability to evaluate changes in services based on planning*

*the ability to implement planned change*

*the ability to negotiate with patients and colleagues*

## **Additions to typology D based on interview data**

The ability to prioritize between competing goals

*the ability to overview the entire service (breadth of knowledge), including the ability to distance oneself from the immediate task in order to place one's work in the context of the whole of the physiotherapy service*

*the ability to generalise from specific to common elements in planning*

The ability to analyze ongoingly (reflection-on-action and reflection-in-action) in planning and organizing the physiotherapy service as the context to clinical work

## **Additions to typology D based on documentary evidence**

None



## **Data set 7: the implementation of the district-wide education program and "basic" professional knowledge and skills**

### **Evidence**

One of the first major changes following my appointment to district physiotherapist was the implementation of a district-wide education and training program. Its purpose was twofold: to raise the staff's knowledge and skills through lectures and workshops, and to provide opportunities for the staff to meet and to exchange information. The opportunity to meet with colleagues was particularly important because many physiotherapists worked as sole practitioners.

The data about the technician service had already painted a picture of professional isolation ("being isolated" and "feeling isolated") and a feeling of regret of not having the opportunity to communicate with colleagues. This was therefore a problem which I needed to address. But apart from these two reasons, I also felt that the program gave me the opportunity to get to know my staff as a group and to generate with them a vision of how the service was going to be changed.

From the beginning, the district-wide education program was drawn up with the active participation of the staff. All physiotherapists were asked to submit topics of interest because I hoped that participation would increase their interest in the program.

My analysis of the first education program in 1985 (appendix A) showed that all specialist sections submitted suggestions for topics to be included in the program. Of the twenty-two topics seventeen were clinical and five were professional/managerial. The latter had been suggested by me.

Ten sessions were held by physiotherapists who wanted to talk about "their service" to the rest of the staff working in the health district. The twelve remaining lectures were given by other professionals. All lectures on professional and managerial matters were given by me.

The significance of having a district-wide education program was conveyed in the quote below, which was typical of what the other fourteen interviewees said.

"You gave it [the education and training programme] so much importance and this gave people the impression that you were going to support any initiatives on education...Most

physios are quite capable academically because the physiotherapy training has changed and is much more academic...The atmosphere here is such that their academic aspirations are nurtured. You nurtured it - you have a very good academic approach so that people live in that atmosphere and they know that academic things are going to be encouraged".

The interviewees linked the district-wide education program to specific changes in levels of knowledge and skills. A significant increase in "breadth of knowledge" was said to have occurred. The quotes below describe the changes to greater breadth of knowledge and how this new knowledge was used in physiotherapy practice.

The quote distinguished between two dimensions of breadth of knowledge. One was knowledge and understanding of the theories and practices of other professions. The other was the broadening of skills by incorporating the techniques used in other physiotherapy specialisms into one's own specialism. Both were used to analyse patients problems and were used to treat patients in a more competent manner.

"Say chest work - when I joined, the physios were reasonably competent in their work, but it was extras, say biochemistry. There was no expanse out of physiotherapy... Now you find that people are looking at what will affect my treatment. So, you have a geriatric patient and he is confused - then why are they confused ? It's better education which has made the difference. We had some lectures on chests and what other people do...So you need to look broader and that wasn't done but it is now...you have to start to understand why things are not working. You are doing the right treatment but they are not improving, why not? So you look at other things and think "well, their fluid balance is very out", particularly in chests we find this all the time. They may have pulmonary oedema and their fluid levels will be "up the shoot" and there is nothing about that and so you will have say "can we check the fluid balance ?" And then they will say "oh yes, it's out; give them diuretics or something like that. So we are working much closer with the doctors and the nurses...Unless you knew all the things related to your treatment then you couldn't point out to people that this is the problem".

Although the district-wide education and training program is mentioned in the quote as one of the sources of generating greater breadth of knowledge, other mechanisms were identified later. In particular multi-disciplinary teamwork - only briefly mentioned in the excerpt - played a role in widening the physiotherapists' repertoire of knowledge. Nevertheless, the main vehicle for getting access to the knowledge of colleagues was considered to be the education and training program - the "Monday sessions". The quote below from the paediatric service was typical of the other physiotherapists' comments.

" "Nobody knew about my work..or knew me..It was through the "Monday sessions" that I got to know the physios at the L. and D. and what they did. I learnt a lot about new techniques and developments in physiotherapy. I learnt about "reality orientation". I also learnt from out-patients about "Maitlands". It was very helpful for some of my patients and I applied it. But you also had the chance to chat to other people - what they do. So, if you get to know them...who they are...it's also easier to phone them and ask for help." "

The interviewees linked knowing and understanding about other professions and specialisms to the actual use of this knowledge in their own practice. A good example of this was the pooling of the knowledge and skills of two physiotherapy specialisms to solve a particularly difficult clinical problem. In the case described below, the social skills of the specialist in mental handicap were combined with the skills in spinal manipulation of an out-patient specialist, to solve the "backache" problem of a mentally handicapped male patient.

"I had this mentally handicapped patient who was in his fifties and he had backache. And because I knew the physios at out-patients I took him there to be treated. It was too difficult for me to do. E. treated him. Normally, the out-patient physios would have been scared out their wits to treat a mentally handicapped patient, but between the two of us we managed. He got expert manipulation from E. and I helped her to handle him. He is quite violent at times and could have disrupted the whole out-patient department - upset all the other patients. They wouldn't have known how to cope..."

## Summary

- The physiotherapists' accounts provided good evidence for two categories of typology B: "knowledge of the knowledge of other physiotherapy specialisms and other professions, and the ability to use this knowledge in physiotherapy practice".
- There was evidence that the physiotherapists were able to use this knowledge to analyse physiotherapeutic problems in their own work.
- There was also some evidence of the combination of knowledge and skills of two specialisms to solve particularly complex clinical problems.

## **Insights and preliminary discussion**

- I noted at this stage that the ability to understand and use the knowledge and practices outside the specific knowledge system of each profession had not been described in the literature as an aspect of professional knowledge systems.
- However, during the group interviews, the physiotherapists also linked breadth of knowledge (defined as knowledge of other specialisms and other professions) with professionalism. Lack of knowledge about other specialisms and professions was associated with technician physiotherapy. The reasons were that "professional" physiotherapists had a greater ability to see the relevance of the knowledge and skills of other specialism in solving their own clinical problems. Technician physiotherapists were unlikely to have the intellectual skill to detect these links or overlaps in specialisms.

### **Data sets about professionalism in physiotherapy (contd.)**

#### **Data set 8: the implementation of a specialist structure and "complex" professional knowledge and skills**

##### **Evidence**

The structure which existed in 1985/86 has already been discussed in chapter one where diagrams of the physiotherapy service at the district general hospital in 1985/86 and the changed service in 1986/87 were shown.

The remarkable feature of the earlier service had been the virtual absence of senior 1 posts and scarcity of senior 2 posts. This meant that the service functioned at very low levels of specialism, and therefore also at low levels of knowledge and skills.

To increase the levels of knowledge and skills of the service, I decided to change the organization's staff structure by generating more senior posts, and in particular senior 1 posts. In future, each specialist physiotherapy service was going to be led by an experienced clinician at senior 1 or superintendent 3/4 grade.

The grade of the leader depended on the size and complexity of each specialist service. For example, the paediatric service required a superintendent, rather than a senior 1 as a leader, because the work of the service was very diverse and complex. Physiotherapy ranged from treating newly-born babies with mild physical handicaps to treating severely physically and mentally handicapped young adults (and some elderly multiply handicapped

adults). This work required a high level of skills which needed to be used in flexible and imaginative ways.

An additional problem was that the service was geographically dispersed throughout the entire health district. This made it more difficult to co-ordinate services to patients, to supervise staff and to prevent the professional isolation associated with this type of service.

In contrast, the technically less complicated orthopaedic service at the district general hospital required a specialist at senior 2 level only. Physiotherapy after orthopaedic (surgical) surgery tends to be constrained by basic orthopaedic procedures, resulting in physiotherapy work which tends to be less complex.

The new service structure developed gradually over the four-year period. Although many new posts were eventually financed by the health authority, the initial strategy for increasing the degree of physiotherapy specialism was to upgrade some existing physiotherapy posts. For example, at the district general hospital three senior 2 posts were upgraded to senior 1 within the first six months after my appointment.

The interviewees confirmed that the staff had been informed of my plans for increasing the number of senior posts. The physiotherapists also reported that they had been aware of the need for these changes, in particular because I had asked them to prepare proposals for increasing the senior structure in their section. These plans were to be submitted to the health authority who, after some lengthy negotiations with me, agreed that the physiotherapy service needed to become more specialized.

The excerpt (below) is typical of the physiotherapists' account of the situation. It also corresponds with my own memory of events soon after my appointment.

"The structure has been turned upside down. It had been bottom heavy with lots of junior posts and very few senior posts. At one time you asked us to prepare some proposals for the health authority so that we would get more senior posts. I think you had been to see the administrator and he had promised that he would discuss it with the unit team. You told us about it at one of the Monday meetings. The idea was that each section would have their own senior".

The fourteen interviewees thought that one of the most important initial effects of the more senior structure having been increased was staff retention. The reason for this was that the

physiotherapists felt that the more senior staff structure would provide opportunities for promotion.

"Now we have a better career structure. Before you had an awful lot of people blocked at the bottom ready to move from basic grade to senior 2. They would leave the district to find it. There was also no progression from senior 1 to superintendent...What they wanted was to improve their skills and abilities and awareness".

Eight interviewees reported that they were aware how the improved career structure generated opportunities for "personal growth", which had two meanings. At the most basic level, the meaning of "personal growth" was opportunities for "self-advancement" or "career advancement". However, seven of the eight interviewees linked career development and personal growth explicitly to the development of "skills" and "ability" - and to "changes in awareness".

Changes in an organization's levels of knowledge and skills are likely to be enhanced if more highly specialized and experienced people are employed. In the NHS, these specialist structures are enshrined in the Whitley Council's Pay and Conditions of Service in which the senior 1 grade is defined as a "degree of skill and specialisation"... "significantly beyond that which may be expected of even an experienced practitioner" or beyond "particular expertise and ability".

The link between senior specialist posts at senior 1 level and "changes in awareness" (described in the excerpt below) was particularly interesting and relevant to professional knowledge systems.

"...there are all sorts of aspects to career development in the same area [specialist]...the development of someone's skills, abilities and awareness...When people gain professional development they look at things in a less blinkered fashion. You develop a broader vision ...you see a lot more influencing factors on which issues are judged and that enables you also to look further into the future. You get a long-term view of things...you also start seeing the block and how you can get round them. It's something you don't realise to begin with because I think it's a maturing process. You learn to make better judgments."

In the excerpt, the progress in a physiotherapist's awareness, which occurs with "professional development" and the process of "maturing", is described in terms of "developing a broader vision", a "longer-term view", the ability to "see and overcome blocks", and the ability to make better "judgments".

The repertoire of skills attributed to experienced practitioners can be interpreted using the concepts of the professional knowledge systems described earlier in chapter three. More experienced professionals are able to observe "more relevant factors" because they have a broader vision based on a broader range of concepts. And this broader vision guides their "broader" powers of observation.

Repeated "experience" of applying concepts in professional practice makes it possible for professionals to make a more surefooted judgment about the significance of each of the factors. More experienced professionals are more skilled at making professional judgments in comparison with their less experienced colleagues, and an aspect of making these judgments is making predictions about the future course of a particular situation - producing a "longer-term view".

This watershed in becoming an expert practitioner seems to occur when physiotherapists become sufficiently skilled and confident to "choose" intelligently between a number of approaches to treating a patient. This means being able to choose some aspects of one particular technique and being able to combine it with some facets of other techniques - in order to "overcome blocks" in thinking, as the interviewees said.

### Summary

- Documentary evidence about the existence of a specialist service structure and the definitions of skills (Whitley Council) which guide appointments to senior posts provided relatively poor and indirect evidence for the specialist skills which are likely to be associated with organizational structure (a specialist, rather than a generalist structure).
- There was evidence about the skills of clinical staff who function at senior 1 level or above. The group of skills which reportedly distinguish experienced practitioners from less expert physiotherapists are:
  - the ability to think broadly
  - "a broader vision" (breadth of knowledge and thinking);
  - the ability to plan ahead
  - "to look further into the future - a longer-term view";
  - and the ability to see and circumvent obstacles during the process of problem-solving.

### **Insights and preliminary discussion**

- This account of expert practitioners in physiotherapy was in my own experience as a physiotherapist a common account in physiotherapy.
- Because the account indicates the existence of a sophisticated degree of professionalism in physiotherapy, it was kept in mind during the interpretation of the rest of the interviews.
- The categories of professionalism reported by the physiotherapists in this part of the interviews described skills which were identical to the type of knowledge and skills identified in relation to development planning ( breadth of knowledge and its application in planning), planning ahead and overcoming any obstacles to reaching future goals).
- This meant that the same sophisticated intellectual skills were used in the "technical" and "non-technical" domain of professional practice.



## **CHAPTER ELEVEN**

### **RESULTS: PROFESSIONALISM IN PHYSIOTHERAPY - THE MIDDLE PERIOD**

Data sets about professional physiotherapy practice: Data set 9: the "cuts" (emergency reductions in service) - professional knowledge and skills - evidence, summary and preliminary discussion.

Data set 10: (teams): the education system - professional knowledge and skills, decision-making and structure - evidence, summary and preliminary discussion.

Data set 11: (teams): the communication system - professional knowledge and skills, decisions and structure - evidence, summary and preliminary discussion.

Data set 12: (teams): the support system - professional knowledge and skills, decisions and structure - evidence, summary and preliminary discussion.

#### **Data set 9: the "cuts" (emergency reductions in service) and "semi-complex" professional knowledge and skills**

##### **Evidence**

The "cuts" refer to reductions in physiotherapy services because five physiotherapists at the district general hospital became pregnant. This meant that staff numbers were reduced by a quarter because of maternity leave.

At first, the remaining staff tried to cope with the ensuing excessive workloads. When this became impossible - due to personal stress - the physiotherapists and I jointly decided that the only way to cope was to reduce services to patients.

Like any other local organizational problem, this was discussed at one of the "Monday meetings". I suggested to the staff that one way of reducing the excessive workloads was to cease treating some patients. This distressed the physiotherapists initially even more than the excessive workloads. They believed that they owed their patients a professional "duty of care" (to provide treatment when it was required), but the time available was insufficient. The period of "the cuts" was remembered as an extremely unhappy and stressful period - "the unhappiest time we ever had".

The staff and I eventually decided that each specialist service would need to assess the size of workload it could cope with. An aspect of this assessment was the decision about which type of conditions required treatment most urgently, and therefore had to be treated; which patients were not to be treated at all; which patients were to be seen less frequently.

The physiotherapists and I also decided that each specialist section would produce rational criteria to make these very difficult decisions, and that these criteria and decision would have to be presented to an open forum of physiotherapists for further discussion.

The physiotherapists were reminded that quality criteria had been discussed sometime earlier during one of the Monday meetings. I suggested that these ideas might be useful for working out the service's priorities.

The first quote below describes the physiotherapists' feelings and sense of professional dilemma, which give the reader an understanding of the degree of stress under which the physiotherapists were able to pool their energy. Moreover, they were able to develop knowledge and skills which contributed significantly to the development of local professionalism.

"It went very much across the grain not to treat people but it was also very obvious that if you treat a lot of people badly then you are not giving a professional service, and that's hard to reconcile. It was very hard...Nobody wanted to do it because they knew what would happen to particular patients. It was very hard to come to terms with. I mean you were affecting their lives totally. It seemed such an unfair way of doing things and it put you under a lot of stress. I mean you were having to watch those people. Morale just went down. It was not a job that was fulfilling. It created a lot of bad feelings at the time because you were being asked to do something that you really didn't want to do and you saw the really bad effects it was going to have on the patients".

It is clear from the quote that not treating the patients in their care was extremely hard for this group of dedicated professionals. What added to their distress was the "visibility" of their patients' deterioration (due to lack of treatment) because the patients remained in the hospital wards. It was also put to me that the decision to prioritise caseloads was much more stressful for the physiotherapists than for me, or for any other manager.

"It's easy to say if you are not there in person you are going to treat so many people and not treat so many people, but when you are there in the ward and big eyes following you and Mrs. "So-and-So" is there, it's hard to cope with. And although we all realized it was

a sensible thing we didn't all follow it to the letter of the law. We were very much aware that if you aren't going to treat somebody properly you are neither doing the patient any good nor the profession any good. And we still have that problem but are maybe better at putting our priorities".

Nevertheless, all physiotherapists eventually made plans to prioritise their work, and were able to describe this process and the knowledge and skills which they had learnt during this activity.

The surgical section developed the following classification, the general principle of which applied in all other physiotherapy specialisms. Nevertheless, each specialism made variations within these general principles, in response to their specific situation.

"I classed the operations into categories of who you must see. There are certain categories where you must see everybody... There are things like hernias or minor operations when you can say "they don't need us unless the patient is at risk"...So you can cut a whole group of patients. So you make a list of what the patient requires to have had before you treat them. They have either to have had big abdominal operations or if they have small operations they must have a history of smoking or be a chest patient or be over sixty-five. Hence to treat or not to treat was based on a number of criteria set at that particular time."

The description of how decisions about priorities of care were made shows that the process was based on clinical criteria. The classification of "operations" (e.g. "major"/"minor" operation) determined the prediction whether or not a patient was likely to require post-operative treatment from a physiotherapist. Other conditions (such as a "known chest condition" or "being a smoker") which affect the likelihood of needing post-operative physiotherapy were also taken into account.

A second strategy was to terminate treatments earlier. This was based on carefully developed criteria also. An aspect of this was to delegate some responsibility to the patients themselves.

"We also decided to be more stringent on the cut-off point. If a patient was fully mobile and they weren't chesty then they would just need a check - putting the onus on the patient to inform us whether they needed any treatment".

A third measure was to delegate responsibilities for some patients - less complex work - to other health care workers. This was the case in the medical section and in the elderly care wards.

"All of the chests were priorities because it is life-threatening. The strokes came second...generally the more acute they were, the more likely they were going to improve. Sometimes as far as improving mobility is concerned, you might ask the nurses to walk the patient after you had shown them how to do it...So it made you recognize what priorities were. How much to give to a patient and who to leave out."

The quote shows that these priorities were determined on the basis of clinical knowledge and experience also. Chests and acute strokes were considered priorities because chest conditions were considered to be potentially life-threatening. Strokes were treated because physiotherapy was considered to be of high value to stroke patients. Mobility problems could be delegated to nurses because "walking a patient" was seen as a routine type of activity.

The medical specialism also adopted a "self-care" approach in order to decrease the physiotherapists' "hands-on workload". The quote below also provides some evidence that the approach adopted during this period of emergency continued to be used well beyond this time.

.."we were getting to a stage of teaching patients self-care. So, by spending time with the patients - showing them how to cough, they would also do their own treatment. They didn't need a physiotherapist with them for twenty minutes. So, educating the patient decreased the our own actual hands-on workload. So I think since then our style of physiotherapy has really changed. We go much more into the preventative and the onus is on the patient".

A further strategy adopted during this period was to discontinue physiotherapy in some areas of the hospital. The normal daily service to the gynaecology ward and the eye ward was stopped and provided by special request only.

"We agreed with "gynae" and the eye ward that they should call us when they needed us rather than a physio going there every day and asking...which had been a waste of time anyway. We just hadn't thought of it before."

There was also evidence that the planning ethos and the skills used for the prioritization of clinical care were transferred spontaneously to other activities. A more efficient and effective system for supervizing the work of basic grades was planned and evaluated carefully after some months.

" "When you first start a rotation now we have a meeting and say, "This is what we think you should get out of the rotation" and we try in the middle to say "are you getting this out of the rotation and if not why not?" And at the end we say "what do you think of that ?"... When I started that obligation wasn't there." "

Although implementing a better system of supervizing basic grade education fits into the new ethos of organizing more efficiently and effectively, this event also reminds us directly of the planning skills which had been developed during development planning: goal-setting and evaluating the success or failure of a scheme. This meant that the physiotherapists had "transferred" the skills learnt in one area of work (strategic planning) to staff training and supervision.

The role of physiotherapy helpers was also planned and evaluated more carefully by questioning the purpose of their work and by setting objectives for the helpers. A criterion used was the helper's job satisfaction, but delegating work to the helper also generated more time for qualified staff.

"I re-organized the role of the physiotherapy helper. I thought the way her job was organised didn't give her any job satisfaction. She didn't have a definite role. She now has her own patients and I monitor her. She used to help here and there. I thought we would get more done if we got clear objectives and give her own patients. I plan the treatments and she does it."

One of the physiotherapists summed up what had been learnt by looking at this issue from the perspective of professional responsibility.

"The responsibility was definitely there. Now we could make a rational decision about which patients were treated and why. You are able to defend your decisions, which is very reassuring. It is less stressful and we quite liked it after being upset about it initially".

The same respondent contrasted this issue with her own reduced sense of responsibility before the cuts.

"I didn't like withdrawing patient, care but I think what I had to deal with was to take my sense of responsibility further. I had been reluctant to do this. What I wanted to do was to stamp my feet and say "I want help", rather than being responsible and say, "you can't do all of it". You had to think what the long-term benefits were.... It challenged my notions of what had to be done and what didn't have to be done. Before, if a handicapped child needed physio then I would have accepted that. Once the cuts had happened you had to weigh these benefits of what you were doing against everything else because you couldn't do it all".

The physiotherapists reflected on the long-term effects of "the cuts" and the knowledge and skills which had been learnt. The excerpt below expresses the generally agreed view that this extremely stressful period had - after all - been a time of great achievement.

"It made us much more organized because we had to be and we had to work out what our priorities were...It made us recognise what the priorities were...In the olden days you more or less treated everybody even if you just took them for a walk, which was a waste of time. You really tried to get round everybody but you couldn't keep it up and you weren't treating anybody very well. With the cuts you did a good job with the ones you saw...you learnt that you only had your day and which patients really need you and which ones you had to leave. Now I can go into an area or ward and know exactly who needs to be done and I can cut down on a list of 15 - 20 patients to 5 and say "that is who need to be done today". And I can also daily prioritise and for a week and I know who maybe needs to be done twice a week. Looking back, although it was a stressful time, it was a good time when we learnt a lot".

## Summary

- The interviews provided evidence for the following categories: the ability to generate criteria (knowledge) for the process of prioritizing caseloads (\*) and workloads (\*). This skill was added to typology C.
- Other categories, not contained in typology C were: the ability to "generate more time" through the more efficient and effective use of time;
- the ability to delegate physiotherapy work to others;

(\*) Caseloads refer to the number of patients and types of conditions to be treated. (\*) Workloads include other tasks besides treating patients, such as the writing up of patients' case notes, communicating with other professionals etc.

- the ability to transfer the knowledge developed in one area of work to other activities.
- The interview data confirmed the most general category of typology C: the ability to adjust the level and quality of work to be performed in response to the fluctuating demands of the particular work situation.

### **Insights and preliminary discussion**

- The data provided good evidence for the type of knowledge and skills initially used in development planning (strategic planning). These types of skills were now applied to operational planning. As in strategic planning, clinical criteria determined the goals of the service.
- The ideas used to plan caseloads and workloads were also used ("transferred") to plan the clinical education of basic grade physiotherapists and the role of physiotherapy helpers.
- These data are evidence for the physiotherapists' ability to "generalise" the skills learnt in one area of work to other activities.
- Planning caseloads and workloads on a day-to-day basis required also a broader vision and ability to overview an entire system.
- The approach to planning one's work required an explicitly rational analysis of patterns of work, and therefore a transfer of the professional (clinical) approach, as described in the literature, to the non-technical sphere.
- It was noted at this stage that these operational planning skills developed only in response to a crisis. In spite of analytical skills having been used in clinical work, the ability to adjust the level and quality of work, using rational criteria, was not developed spontaneously.
- From the perspective of the actor-based framework, the development of operational planning skills represents a significant and important extension of "knowledge about" the intricacies and procedures, which Burrage (1990) considers to be an immense source of power for the professions. The significance of this knowledge was tested locally in a struggle with the medical profession over the physiotherapists' access to patients and their right to determine the nature of physiotherapy treatments.
- From the perspective of axiomatic theory, the staff being able to generate and use criteria for decision-making about caseloads and workloads represents a further devolution of decision-making powers to the middle layer of the organization. The physiotherapy service became increasingly and constantly more "organic".

- Although the details of the "quality" of decision-making were not the focus of the analysis, it is plausible to argue that the quality of decision-making is likely to have been better in comparison with the decisions made by "functional" or "general" managers.



## **Data sets about professionalism in physiotherapy (contd.)**

**Development of team functions: education, communication and support - professional knowledge and skills, decision-making and organizational structure**

### **Introduction**

The development of three specific team functions was listed by all interviewees as key events: the development of an education system (data set 10), better communication (data set 11) and the development of a system of support (data set 12).

The question of teams had already been discussed in the earlier data set about the new specialist structure, where the special clinical knowledge and skills of the senior physiotherapists had been the focus. These interview data were about how the specialist teams began to develop their special functions, and the skills which are commensurate with these functions.

**Data set 10 (teams): the education system - professional knowledge and skills, decision-making and structure**

### **Evidence**

One half of all interviewees (eleven) linked the team development to "the cuts" because this difficult and stressful event "united" the service around a common purpose.

"The cutbacks were one of the events which unified people. Everybody felt quite guilty about not being able to provide the service...a lot of people were sick and there was a lot of unrest. And getting everybody together and agreeing common criteria and giving reassurance to clinicians that this was the right place to cut...it sort of made the service go forward together and see the benefits of working as a team for the first time".

This excerpt conveys a general sense of a group of people beginning to feel that they have a common purpose and are therefore in some sense a team. But apart from a sense of common purpose, specific team functions were identified. One of these functions was clinical education.

The program for clinical education in the specialist teams consisted of a series of fortnightly lectures and clinical case presentations, which were given by any team member on a subject proposed by anyone in the team. Case presentations were often prompted by a physiotherapist not knowing how to solve a particular clinical problem. Presenting one's case to colleagues for discussion was seen as a possible means to solving the problem. "Presenting your case to colleagues can help", so it was said. In contrast, lectures about clinical matters were often prompted by a team member wishing to share new knowledge after having attended a course or workshop outside the health district.

The physiotherapists in the medical specialism gave a full account of "their" education program - an account which was typical of the other education programs.

"We used the education sessions in two ways. Often, the physios have a problem with a patient, in particular with medical cases...you don't know how to progress. You used to treat strokes...you know how difficult it can be. And then you ask your team. Everybody can think about it. We think about it together. But you had also said that we should give a lecture when we had been on a course. We tell the other physios what is new."

The impetus for organizing the clinical education program had initially grown out of a concern that no structured education was provided for the basic grade physiotherapists. The issue had been raised by some newly recruited basic grades, and in response to their concerns the team leaders had organized clinical training. The quote below expresses this general concern about lack of clinical education.

"I can remember that we had a meeting [a "Monday meeting"] to discuss the education of the basic grades and we said there was a need and how we could improve it...There was concern that education wasn't properly structured and that it could be improved...we started "mini-lectures" on a weekly and fortnightly basis in the teams".

The quote above adds a third reason for the clinical education program: "lack of structure" (or organization) of basic grade education.

The next excerpt conveys that education and training began to be organized in a highly efficient way, using the same rational approach which had been used before in operational planning.

" "The responsibility was definitely there in the teams. When you first start a rotation we have a meeting and say, "this is what we think you should get out of this rotation..." We have a list and I say to the basic grades, "What do you want from that list ?"...It's a big onus on them because if they don't tell you, they don't get it and it's not your fault... and we try in the middle to say, "Are you getting this out of the rotation and if not, why not ?"... And at the end we say, "What do you think of that ?" Then you know it's really being fed back. Then it's really up to you because you said at the start, "This is what we want you to get out of it"...You feel more obliged that they understand it, whereas I don't think that obligation was there when I started." "

Apart from conveying the physiotherapists' ability to organise an education system, the quote also portrayed a highly developed sense of professional responsibility, noted earlier in relation to the cuts.

But although the senior staff accepted responsibility for training their more junior colleagues, it was also conveyed to the basic grades that the responsibility for learning lay with the learners themselves. The basic grades had to accept an equal share of responsibility for their program of education - "If they don't tell you, they don't get it and it's not your fault."

The next quote shows that clinical education programs were tailored to the specific needs of each basic grade - needs which had been identified in open discussion with all team members.

"At the start of the rotation we all sat down together and we would have an open discussion of what the new person would have to cope with and how they felt about treating people with those sort of conditions...and about their experience so far...where they felt confident...so you had a forum at the beginning...and what we could offer to the basic grades....then half way through the rotation we would review the progress."

All twenty-one interviewees also thought that all physiotherapists acquired teaching skills during the clinical training sessions. Two types of skills were identified: the ability to assess the state of one's knowledge, and the ability to lecture and to teach. But thirdly also, having been given the responsibility for teaching led to a more investigative and information-centered approach.

"The thing was that people were given more responsibility when you came into the service....So, we were given the responsibility that this week we had to do some teaching.

You could choose the topic and you went away and looked into it and found out about it in some detail and because of that you got used to looking for more information. And because you had to teach other people you had to understand it yourself first... You had to search for what you knew yourself. The basic grades had to teach as well, so they had to know what they were talking about. You also learnt how to lecture. A lot of people hadn't done this before. I used to be quite scared but now I am very confident".

Five interviewees also recognized that having been asked to teach regularly improved their teaching skills. One aspect of this was the ability to vary the style of presentation with type of audience.

"So there is a lot of learning because you have to prepare the talk for the education program and I think when you do that it's also presentation skills you develop...it also gives you a lot more confidence in other situations as well. We give a lot of lectures to the nurses now and you have to vary your material."

All interviewees thought that the education sessions had promoted "more open communication" because the physiotherapists had to justify their clinical decisions to their colleagues. A typical comment was from one of superintendents.

"I used to be the only physio on paediatrics...then the basic grade came and we became a team...Now there are three physios...Because we started the education sessions the physios brought in ideas so that I had to work to a higher level...E. really questions me on what I do. I have to justify my actions."

One newly appointed physiotherapist who had left another physiotherapy service because of her dissatisfaction with its excessive sense of hierarchy, expressed her satisfaction with the "very special (local) atmosphere" of "sharing" knowledge and expertise.

"The attitude of imparting your knowledge to other physios is special. There is a very special atmosphere here. I think it has changed here because we have that sort of person working here. It's possible that we give the message that it's expected that we will share and you are not a pinnacle because you are a specialist. You have to share and people get satisfaction from passing knowledge on and getting the feedback from it because people are free."

Finally, five physiotherapists who worked at the district general hospital, linked the quality of the new education system to the greater availability of senior staff. The excerpt

below also provides direct evidence for the special knowledge and skills of senior physiotherapists, for which very little evidence had come to light during the interviews about the new specialist structure.

"So, having more senior staff led to better teaching... there was little teaching when I was first here. Now you find that all departments have some form of inside education. There are people here now, like L., who teach really well. She also has the diploma in intensive care and was awarded a prize in the exams. She is very up-to-date in the knowledge in her field..."

### **Summary**

- The interviews provided evidence for the following knowledge and skills: the ability to plan and organise clinical education and training for physiotherapists efficiently;
- The skills used to set up this particular system were the skills which had already been used in short-term planning during "the cuts".
- These skills corresponded to those listed in typology C: goal-setting, generating and using criteria for planning a system.
- The ability to respond to the unique needs of individuals (as opposed to providing standard solutions) was identified in relation to the education of individual professionals.
- Other skills identified were: the ability to "share" clinical knowledge and expertise with colleagues.
- The ability to engage openly with others in the critical examination of one's knowledge.
- Teaching skills were acquired by participating in specialist team education.
- The idea of "responsibility" came to the fore again in the interviews about team work. It was used in two ways: one was to acknowledge the delegation of decision-making to the teams (the responsibility was definitely there in the teams"). But "responsibility" was also used in the sense of accepting responsibility for one's actions. For example, the basic grades were made responsible for "their" "learning" whilst being seconded to a specialism.

### **Insights and preliminary discussion**

- The operational planning skills first used to organise physiotherapy services on a short-term basis were applied to organise the education system more systematically.

- Organizing the education of basic grades was based on the basic principle that the unique needs of individuals need to be assessed and met (a fundamental principles in professional type of work, and aspect of clinical professional work, as outlined in typology B).
- The physiotherapists seemed to be more sensitive to good communication because a number of skills were distinguished:
  - the ability to "share" knowledge;
  - to engage "openly" in analyzing one's knowledge with others.
- Other subtle qualities (personal skills) were identified: a sense of responsibility and acting in a way which is consistent with this sense of responsibility.
- "Sharing" knowledge "openly" (communication) and the notion of responsibility were kept in mind at this stage rather than added to the typologies.
- The data contained evidence about organizational issues and problems being raised at all levels of the organizational structure. For example, the basic grades had prompted the setting up of the clinical education sessions.

### **Organizational structure**

- The data provided evidence about the consolidation of the specialist team structures which had been one of the early changes which I made to the physiotherapy service.

## **Data set 11 (teams): the communication system - professional knowledge and skills, decisions and structure**

### **Evidence**

The data about the education system have already shown that the physiotherapists' communication skills improved because of clinical education. Knowledge was "shared"; communication was "more open" and the physiotherapists were able to adjust the way in which they communicated in response to a particular audience.

These data were linked to a relatively formal situation (lectures and case presentations). However, the physiotherapists thought that communication changed also in less formal circumstances. Being in teams provided opportunities for more informal communication with colleagues - "chatting", "overhearing" other physiotherapists talking about patients. Like formal communication, these informal "chats" also provided opportunities for learning.

"If you are a close-knit team you discuss things rather than go off on your own track and do things...or you might hear someone else saying, "Oh, that helps the quality...Being in the team and chatting with other people helps to change things...It makes you less complacent because you talk about things. It makes you a better physio."

Informal communication ("chatting" and "overhearing") was also linked to being "less complacent" and "changing things" i.e. producing a better quality of work.

Better communication in the specialist teams was also linked to the development of analytical skills. A phrase which the respondents commonly used to summarise this process was, "bouncing ideas off somebody else".

"There was much better communication amongst the physiotherapists because it was a matter of bouncing ideas off somebody else...the fact that you talk out your ideas and your thoughts and have to put them into words. You have to be more precise then. And then you have to maintain them against argument. Therefore you either become more positive in your approach or you realise your errors and adapt accordingly...I think the more contact you have, the more opportunities you have to learn and to experience other people's problems, the better clinically skilled you become".

The process of team communication identified in the last excerpt can be analyzed in the following way. Firstly, in order to communicate, thoughts needed to be put into words,

which made it necessary to be more precise. Putting thoughts into words, in order to communicate, led to greater precision in thinking. "Thoughts put into words" were then tested by other team members (one's professional peers), which meant that the person putting forward an idea had to justify her/his thinking.

Two outcomes were identified in the quote: ideas were modified, but if other team members agreed with what had been said, their agreement added power to the idea which had been expressed. In either case, something was learnt simply by communicating the idea. The excerpt linked communication explicitly to "better clinical skills".

The next quote provides some evidence that the critical examination of knowledge in teams became a matter of routine.

" "You had more communication..backwards and forwards. And there is more questioning: if it isn't working, why isn't it working. The nice thing was that if you didn't understand it and you said, "This is what it said in the book but I don't understand it", and then somebody would say, "Oh, it works like that". We look things up all the time now. When I came here...It would have terrified me...You can't pick all the holes in it yourself. You need somebody to see where the holes are. We are all doing it all the time now - even when you meet the physiotherapists who work elsewhere in the district. " "

The excerpt also tells us that there was "more communication" and that the particular type of communication was identified as dialogue ("backwards and forwards"). But communication was not only more plentiful inside the specialist teams, more communication occurred with physiotherapists not belonging to the team.

The physiotherapists also thought that the team structure provided opportunities to "share knowledge" acquired outside the health district. The earlier accounts about the education system had shown that the team members who attended courses elsewhere reported the contents of courses to all other team members. This pushed the levels of knowledge and expertise to higher levels. The "communication mechanism" was identified in the next quote in terms of "providing access" to other physiotherapists' knowledge. In turn, "access" led to a more self-critical approach to one's work - "...am I really justified in doing it my way?"

"Being in a specialist team makes you get to know more...The physios go to outside courses and conferences and report to their colleagues and you ask yourself, "am I really justified doing it in my way?" ...Yes, isolation meant that you were forever stuck in your



skills. I mean even with the help of courses it isn't really all that helpful if you are really isolated."

Another dimension of the developing of communication skills was the increase in the physiotherapists' confidence to ask questions.

"There wasn't the same interaction [before the teams]. There wasn't much questioning, whereas now people aren't frightened to ask. Nobody feels a fool. It's so informal."

### **Summary**

- The interviews provided evidence for the following knowledge and skills: the ability to share clinical knowledge and expertise with colleagues and other professional groups;
- the ability to engage openly with others in the critical examination of one's knowledge;
- the ability to communicate with confidence.

### **Insights and preliminary discussion**

- The three categories listed in the summary can be subsumed in the communication category of typology C ("the ability to negotiate with colleagues and other professionals").
- The subdivisions of the communication-category, and particularly the category "confidence", were kept in mind.
- It appeared that the patterns of formal and informal team communication were of a similar type.

### **Organizational structure**

- The data provided evidence about the consolidation of the specialist team structures. "Re-structuring" had been one of the first changes I had made to the physiotherapy service.

## **Data set 12 (teams): the support system - professional knowledge and skills, decisions and structure**

### **Evidence**

The idea that support from colleagues enables people to produce a higher quality of work has already been noted in the discussion of the education and communication systems. Both systems enhanced the levels of knowledge and skills in the specialist teams. The physiotherapists also reported that being in a team offered psychological support which was particularly valuable at times of conflict. As opposed to the quality of work being enhanced because knowledge is communicated, psychological support "empowers" team members "to do better" because it makes them stronger as individuals.

The experience of a team offering support to an individual was strongly linked to "the cuts" which had been the time greatest distress for the staff. One special source of stress had been conflict with other professions because the doctors and nurses did not like the idea of the physiotherapy service being reduced "in their patch". The doctors had protested aggressively about "their patients" not being treated; the nurses were "upset".

It will be useful first of all to re-state how the staff had functioned without being supported by team members.

"We were not organized in teams...and so we were very isolated and felt very isolated...In the medical ward you were really an interloper, coming in and not completely seen as a member of the team...and you wondered how important was what you did...And sometimes it was difficult to convince yourself that it was important and worthwhile and whether you were doing any good".

Some of the basic grades were actually "frightened" to enter the wards - their place of work.

"I used to feel very frightened in the wards. Some of the staff - particularly the [ward] sisters - can be quite off-hand. So you really needed support from a senior".

The next excerpt shows how difficult it was for those who worked without support from colleagues to assert themselves in this seemingly hostile environment. The quote is from an interview with the former deputy superintendent physiotherapist at the district general hospital who, in spite of her senior status, personal confidence and clinical experience,

found it impossible to assert herself without the support of the superintendent physiotherapist.

"From time to time there used to be problems with the doctors on the medical wards. I didn't get any support from S. who was the superintendent. I didn't know what to do - how to handle it. So you just gave in - although you knew it wasn't right from a clinical point of view".

However, the turning point in the physiotherapists' relationship with other professionals came during the time of the cuts. Although prioritizing caseloads and workloads had been decided by the clinician physiotherapists and the managers of the physiotherapy service, I had asked the most senior physiotherapist of each specialism to discuss the details of the cuts with the other professions on the ward (doctors, nurses and occupational therapists etc.). It was foreseeable that cutting physiotherapy services would cause conflicts because professionals always object to patients not being treated. This is what the physiotherapists reported.

" "We had to talk to the [ward] sisters and consultants about the cuts. It was very tricky because no one likes it if services are withdrawn from patients. The doctors had the attitude..."as long as my patients are treated, well, that's o.k. then. Never mind about the others doctors' patients. There was going to be a row." "

Nevertheless, the physiotherapists thought that they had been able to negotiate the withdrawal of services successfully because the senior physiotherapists who were the protagonists in negotiating the cuts with the other professions, were part of the new team structure.

"... because we had seniors and superintendents in charge of a team it was easier. Nevertheless, there was quite a row because the consultants thought that they should decide. But what came out of it was that we were appreciated...if there is a head of department and the head of the team knows the staff very well - medical and nursing - and she is very well accepted...It does stem from the top how the sisters treat the physiotherapists is how the rest take their tune. So, the basic grades come in as part of the team rather than being stranded all by themselves...Sometimes the sisters can be pretty "narky"...so I think the basic grades need some back-up for the start. The sisters will relate to a senior person but probably not a basic grade. This is what happens now because of the teams...but the seniors were also supported by the rest of the team. They could discuss it with the rest of the team. It made it a lot easier - even for them."

This extensive quote reports several advantages of being in a team, which ultimately center on being supported by a team. The first point is that in a hierarchically orientated organization like the NHS, hierarchy needed to be matched by hierarchy during negotiations with other professions. The most senior person in the clinical physiotherapy hierarchy negotiated with the most senior person in the medical and nursing hierarchies. In a sense then, the senior people in each of the professional hierarchies at ward level form a team. They are a team of equals whose authority is bolstered by their right to direct those lower in the hierarchy of their professional teams.

The second point made in the excerpt is that support in teams flows downwards, as well as upwards. Junior members of team need to be protected from hostile members of other professions. Teams offer a supportive structure in which senior practitioners protect the junior members of the teams.

But senior people can be vulnerable too, in particular in situations of conflict. A team can give psychological support to its leader and can therefore empower the leader to succeed.

The knowledge and skills which can be extracted from this excerpt are therefore "political know-how" or social skill. The physiotherapists recognized that the sense of hierarchy of the other clinical professions needed to be matched by hierarchy in physiotherapy and that the team structure (having a senior member in the team) lent itself to this matching of professional hierarchies. They used this awareness to their advantage.

But although the physiotherapists were able to match the strong sense of hierarchy of other clinical professions, they were also able to reduce their own sense of hierarchy to achieve other goals. The next excerpt shows that the sense of hierarchy within the specialist team was "negotiated downwards" to produce openness, sharing of knowledge and support.

"You need a hierarchy but it needn't be emphasized...In a team you are not constantly aware who is the senior 1. You know it, but it doesn't make much difference because people discuss things. So it levels out. So, being in a team facilitates it because you know them. People are very friendly and at ease and you need that in a team. There is a machine to change things, and so anyone can introduce the subject and know they have the opportunity. The environment supports everybody... There is freedom to broach a subject, bounce ideas off people. I have in the past been suffering from not being able to broach a subject, but now I make it absolutely clear what my ideas are. But I think I have learnt from problems in the past..It's not a stifled environment".

One newcomer who had until recently worked in a very hierarchical type of physiotherapy service interpreted the support offered by her colleagues in the local service initially as a form of "checking up", which "frightened" her.

"I got a lot more support from people here. They were interested in what I was doing. I found it bit frightening at first because I thought they were checking up on me because they don't trust me. Then I realized they were interested and to see whether they could help".

## **Summary**

- The interviews provided evidence for the following knowledge and social skill categories contained in typology C.
- The first category was their awareness that professional people need support from colleagues.
- The physiotherapists were aware of some of the key values of other professions (their sense of hierarchy).
- The physiotherapists were sufficiently skilled to use these values to the advantage of the physiotherapy service.
- The data convey the physiotherapists' awareness that team structures make it easy to support colleagues.

## **Insights and preliminary discussion**

### **Knowledge and skills**

- The physiotherapists' reports about this stage in the service's development emphasized to a greater extent the development of social skills. Earlier accounts seemed to focus more on "hard facts", such as the number of senior posts in the new structure. Now, more subtle and more sophisticated issues seemed to be explored.
- The physiotherapists portrayed a sophisticated awareness of organizational values and the ability to use this knowledge to their advantage. The example reported was the medical and nursing professions' strong sense of hierarchy, which was matched to negotiate conflict. At the same time the physiotherapists' hierarchical team structure was adjusted downwards when this was useful - for sharing knowledge and criticism openly within the parameters of the teams.

## **Decision-making**

- The interviews about the teams's new functions (support) were also evidence for the new role of senior physiotherapists. Evidence about this new role had been relatively poor in their reports about the "more senior structure". This was evidence about the seniors' new management role - negotiating levels of service provision with interested parties.
- These data were evidence for the extension of decision-making scope to the middle layer of the organization.
- From the perspective of axiomatic theory, this was also evidence for the decentralization of decision-making in the local physiotherapy service. In more hierarchically structured physiotherapy services these types of decisions were likely to have been the responsibility of district physiotherapists or superintendents.

## **Organizational structure**

- The data provided evidence about the consolidation of the specialist team structures which had been one of the first changes in the physiotherapy service.

## **CHAPTER TWELVE**

### **RESULTS: PROFESSIONALISM IN PHYSIOTHERAPY - THE FINAL STAGE**

Data sets about professional physiotherapy practice:

Introduction.

Data set 13: training physiotherapy students - professional knowledge and skills, decision-making and structure - evidence, summary and preliminary discussion.

Data set 14: "Doing research" - professional knowledge and skills, decision-making and structure - evidence, summary and preliminary discussion.

Data set 15: professional confidence - professional knowledge and skills, decision-making and structure - evidence, summary and preliminary discussion.

#### **Introduction**

During the final stage of the four-year research period the physiotherapy service became a teaching district for physiotherapy students and research into clinical and managerial problems became an aspect of the physiotherapists' role.

The interviewees considered the two developments to be "in a different league to what had been done before" - "the icing on the cake"; "becoming a teaching district is above the norm"; "a reward for what had been done" - "acknowledgement by the profession".

**Data set 13: training physiotherapy students - professional knowledge and skills, decision-making and structure**

#### **Evidence**

Becoming a training district for physiotherapy students had been initiated by me in 1988 when four physiotherapy schools were asked to assess whether the local service was suitable for student training. Each school sent an assessor who approved the district.

Using the professional grapevine, I had asked only those schools which were considered to be "the best". Another criterion for choosing these particular school was the school's philosophy, which needed to coincide with my own philosophy of "professionalism" in physiotherapy. This was important if any clashes between the local physiotherapists and the schools were to be avoided.

Although this philosophy of professionalism was at that time an intuitive matter, it can be defined in retrospect as physiotherapy being "investigative", "being open to criticism and doing better on the basis of criticism", "aiming to do physiotherapy at the highest level of quality", and "working together as colleagues" (as equals). At that time in 1988 this philosophy was, as we have heard from some of the interviewees, "unusual".

I had a number of reasons for wanting to become a training district: it would enhance the reputation of the local physiotherapy service and would therefore attract highly trained physiotherapists. Also, being accepted by physiotherapy schools as a training district was an honour and acknowledgement from highly regarded professional colleagues, which was likely to stimulate the physiotherapists' interest and enthusiasm further. I was also keen to raise local levels of knowledge and expertise to an even higher level. I knew from my own experience as a former clinical tutor that students turn their tutors into more knowledgeable and diligent people by questioning the practices of their tutors.

The idea of becoming a training district was discussed with the physiotherapists during one of the "Monday meetings". The quote below shows the physiotherapists' reaction to having been accepted as a training district - their sense of achievement, acknowledgement and pride. The paediatric superintendent physiotherapist summarized the staff's feelings in the following way.

" "You said when you arrived, "We are going to have students". And we all felt a tremendous sense of achievement that the service had been accepted by the best physiotherapy schools as a training district. I thought it was a real honour. Students are very rewarding and there is a sense in being valuable yourself. The fact that they are asking makes you feel valuable. And seeing the students improve - their handling skills, problem-solving and knowledge, and you know in some way it's due to you as well as their experience. It's nice to know you had some part in it. Now I can see that the service wasn't ready for it before. What students expect from the host hospital is greater now, and it's partly because of the way we handle students that I accept that this service is working at a higher level than the one I left in N. It's probably only a couple of years. The sort of tutoring the students got from L. She had the first students and what came over to me was the diligence, effort and concern. I assume that a lot of people thought, "We take that as our model then" ".

The excerpt also portrays the physiotherapist's insights into the skills required to take part in the training of undergraduate students. Apart from being highly skilled clinicians, the



staff had to be able to organise local student training in a thoughtful way. This is why I had chosen a good clinician and good organizer as the first tutor. Her work became the model for student training for the entire physiotherapy service.

All twenty-one interviewees thought that student training had changed the physiotherapists' analytical skills. My own assumption and experience had been that the questions which students put to their teachers made the teachers "more critical" and "more investigative". The excerpt below was typical of the accounts of the staff involved in training physiotherapy students.

"Having students made us more critical and investigative because you have to know it for them and they ask why and you have to know why...They come with an awful lot of questions you have to answer. It forces you to go away and look things up. You often forget why you are doing something because you have always been doing it that way. It's important because someone is bound not to fit the pattern and so you get better quality if you tailor the treatment to the patient."

The quote confirmed my own experience of having taught physiotherapy students. Students are catalysts for tutors becoming more critical, more questioning and more analytical. Most importantly, the question "why" some action is being taken has to be answered and this pushes the practitioner into a more reflective mode.

The comment about the possibility of an individual case not fitting into the general pattern was particularly interesting because it indicated that a more sophisticated analysis of practice may have been developed by this stage. Ideas about patterns (and deviations from patterns) described earlier as key principles of professional practice, were being voiced.

The interview data showed that the physiotherapy tutors prepared themselves for the students' questions by "reading" and "investigating", that is, by testing and updating their own knowledge.

"I investigated a lot of things before the students came. I read a lot to be able to answer the students' questions. They always ask "why". You have to know it. And you have to know why you are doing what you are doing. The students are a real challenge...You have to be prepared for the challenge because they are well trained now and they are expressing interest beyond the immediate patient."

This quote also refers to an important aspect of professional knowledge and skill systems: analyzing and explaining why something happens. The discussion of professional knowledge systems had shown that this explanation tends to be made by reference to the theories used in professional practice. However, although the excerpt conveys a sense that physiotherapy training appears to be based on explanatory models, it does not provide evidence about the "kind" of explanations which physiotherapy students seek.

The physiotherapists were also aware that the experience of teaching enhanced their ability to teach. We have seen earlier that the district education program initiated an interest in teaching and communication - in being able to adjust one's style of presentation to a particular audience. These skills were now used (transferred) to teaching physiotherapy students, as the excerpt below shows.

"It's good training for teaching - having the students. It helps me to learn when I am teaching. I am a better teacher now and I can adjust what needs to be taught to individual students...some are more advanced than others...We get some from the final year and others are in their second year...Having the students meant that we had to start thinking as teachers as well as clinicians. It's different teaching students from teaching patients. They are starting from a base of having some knowledge about physiotherapy. You expect immediate feedback from the students in the form of questions...My teaching skills are better. There are certain ways in which you teach someone which doesn't work with another. You learn there isn't one way of teaching. You have to stretch your creative abilities."

## **Summary**

### **Knowledge and skills**

The interview data provided evidence for reflective professional type of thinking about physiotherapy practice. A factor which increased this type of thinking were the students' anticipated demands for explanations. This type of thinking is a category of typology B. - There was some (limited) evidence about the category of professional thinking which refers to the conceptualization of clinical problems as "unique". This type of thinking involves fitting individual cases into general patterns, detecting the extent to which the individual case fits into this general pattern, and thus the extent to which the individual case deviates from the norm. The evidence for this thinking confirms typology B. - The data confirmed earlier evidence about communication skills, reported in the physiotherapists' accounts of

giving lectures to colleagues and other staff. The key skill identified then and now was the staff's ability to adjust their presentations to their audience's knowledge and skills.

### **Decision-making and organizational structure**

- The data provided further evidence for devolved decision-making because the model for the training of students was largely developed at senior 1 clinician and team leader level - the middle layer of the organization.

### **Insights and preliminary discussion**

- It was disappointing that no reference was made to the type of explanations sought by physiotherapy students. Different explanations have a different status. Whereas the ability to analyze and explain by reference to theory (such as the concept of the "plasticity of the nervous system") indicates professional type of thinking, the explanation, "This works well in my experience" is more "commonsensical" and likely to be categorized as "pre-professional". - It was noted at this stage that the physiotherapists were able to "generalise" the skills used in one activity to other areas of work. Whereas this is not an unusual skill, "the degree" to which the physiotherapists were able to make these adjustments (the degree of "plasticity") was of particular interest and kept in mind during the interpretation of the data. - Teaching skills had not been an aspect of the four typologies. However, teaching skills can be regarded as an aspect of negotiation/communication skills, and the ability to vary teaching with type of audience is consistent with typologies C and D.

#### **Data set 14: "Doing research" - professional knowledge and skills, decision-making and structure**

At the same time as the physiotherapy service became a teaching district, a highly prolific development of research projects occurred, culminating in twenty projects at the time of the interviews in 1989 ((appendix F; shown there in outline as "Quality Initiatives..."). To co-ordinate the projects a "research and evaluation group" was formed.

The research topics were fairly evenly divided into clinical and managerial investigations, and the projects ranged from pilot studies (in which the physiotherapists made a first attempt to evaluate clinical practice in a systematic manner) to projects which were registered as part of the assessment for a higher degree or a validated CSP course.

An example of a local managerial type of pilot study was "the investigation of the efficiency of the ambulance in transporting patients to the physiotherapy department." This study had arisen from a conflict with the ambulance department, which the physiotherapists decided to solve by "making a case based on facts". Another project of a managerial nature was the "investigation of the efficiency of the physiotherapy on-call system." ( The on-call system is an emergency call-out system for hospital patients who require treatment outside normal working hours.) The system was organized in a more efficient way after the study had been completed.

An example of a clinical investigations was the "back-school study" in which the efficacy of instructing patients in how to look after their backs was compared with the provision of manipulation treatments after back pain. The study was used to re-organize the out-patient department.

Other clinical studies were: "the study of stroke treatments in the community setting"; "the effects of post-mastectomy lymphoedema"; "the usefulness of cardiac/pulmonary rehabilitation" and a "study of strokes", investigating re-admission rates, including the reasons for re-admission.

Five projects were registered as part of the assessment for higher degrees and validated CSP courses in physiotherapy. One was an M.Sc. in health education which compared the efficacy of physiotherapy treatments and health education to alleviate backache.

Two projects were submissions for a B.Sc. with the Open University. One of these projects was about "organizing paediatric physiotherapy". The rest were projects for validated CSP courses on community physiotherapy and psycho-geriatrics.

About half of the interviewees - eleven - thought that "doing research" had been prompted by development planning because this had conveyed the message that the "physiotherapists [bore] full responsibility for the quality of the work [in their section]". Making the development plans had also taught the physiotherapists how to evaluate the service. These skills were now being used spontaneously in the more systematic evaluation of physiotherapy practice.

" "There were two things. One was we were being asked to do things on the management side of things. We had to work out the best method. Although we had been taught how to evaluate the service when the development plans had been made, we still had to work out the best method. It could have been done in a different way because it could have just been given to us...It was also because people had been given more responsibility to improve the service. And they did it by working on projects and by asking themselves "Does it work?" They find out through experience." "

The excerpt also specifies in detail a number of skills, initially used in development planning, and now being used in research. Although a basic model for making the development plans had been supplied to all physiotherapists, some of the details of how to make the plan had not been given because each plan also needed to be adjusted to the requirements of each section. They had produced a considerable variety of plans. (Details of plans had been discussed in the earlier section about development planning and a selection of documentary evidence has been included in the appendix).

This method left room for individual initiative and the development of skills. Based on the fundamental question, "Does it work ?", the staff thus developed their investigative skills. Knowledge and skills emerged through reflecting on action and reflecting whilst acting. It was this which seems to have ushered in "doing research" on this very extensive scale.

But the interest in evaluating practice in a systematic manner had also been spurred by an increase in opportunities for learning because of the new team structure - which created a "structure for learning". For example, "working together in a team - such as treating patients in a gym with well-known colleagues, and seeing them trying different things" - led to more systematic evaluation by project - "looking into it more deeply", so it was reported.

The superintendent physiotherapist in charge of medical rehabilitation described the situation in a way which was typical of the service.

"There are a lot more opportunities to work together in one area. That means you got a lot more opportunities to learn from each other. Before, the physios were working on the wards but not all together in the rehab. department. Everybody was working in a different area and you had to make a special effort to see each other...now there are frequent occasions when we all work together in rehab. A lot of learning goes on between the junior staff and the senior staff. If there is a problem we help each other out. It's very much a two-way thing. People come back from courses knowing more...so you can see them trying different things out. When you see someone trying different things you tend to keep your eyes open as to how other people are treating their patients. And then you say to yourself, "let's look into it more deeply. Let's monitor it. Let's do a project." "

The interviewees were asked to summarise the present state of local research and the skills acquired through being involved in research. The response from the specialist in the respiratory field was typical.

" "People are building now on what they have known before. They are getting more specialized and now research into their chosen field. That has become very common now. They are asking, "Are we effective ?" "What works and what doesn't work?" And you don't always know why something works, but it does. When you do a research project you have to be much more diligent. You have to be much more precise because you have to write it down. And we also had to present it in the research and evaluation group. I felt quite uncomfortable doing that, but it made you think even harder about work." "

The list of skills contained in the interview data was nevertheless disappointing because some of the skills which could have been specified, were not listed. For example, generalizing from one case to many cases based on certain criteria and in accordance with certain rules, was not described.

Nevertheless, one interviewee linked her engagement in research to the development of a highly sophisticated skill: her ability to look at a problem from a number of perspectives.

"You have to be able to look at things from a different perspective and apply it to your problem solving. That's what I got from the projects and the research group. You

encouraged us to think about it in more than one way. It was quite difficult at first because you come from trying to defend what you have done. It's this tunnel vision".

## **Summary**

### **Knowledge and skills**

- The data provided evidence for reflective thinking, research being based on the question repeated by the interviewees, "Does it work ?" - The range of skills used in research were not specified in the interviews. This may have been due to the direction of the interviews - listing the type of research projects being carried out. This may also have been due to the physiotherapists not yet being conscious of research skills because of lack of experience. Most of the interviewees were engaged in their first research project.

### **Decision-making and organizational structure**

- The idea of the staff having been given "responsibility" for the service came to light again. It refers to the devolution of responsibility for decision-making to clinician level. The systematic evaluation of clinical and management activities had now been added to their other responsibilities.
- One respondent only reported that she developed the ability to view phenomena from a number of perspectives.

### **Insights and preliminary discussion**

- The data provided evidence for the large range and number of projects - clinical and managerial - being carried out in the physiotherapy service. At the time of the interviews twenty projects were in progress.
- It is worth noting that the "research projects" were undertaken at different levels of rigour: some for under-graduate and post-graduate qualifications; other investigations were pilot studies to "get a rough idea".
- The number and range of projects may be adopted as an indicator of the remarkable change from 1985 - the beginning of the research period - when nothing had been evaluated. The local physiotherapy service also compared well with national standards. The "Physiotherapy Register of Research" for 1989 showed that one hundred research projects only had been registered with the Society.

- It was noted that the introduction of projects was consistent with the management behaviour in "organic" systems, where the manager agrees goals with employees and offers help in the execution of these goals. In this instance, assistance was offered in the shape of "general" or "basic" models, plus team organization (the local research and evaluation group). However, the general nature of the model made it possible for the staff to use their own initiative, which mobilized the skills of those who have the greatest knowledge about the area in which the investigative activity is carried out.



## **Data set 15: professional confidence - professional knowledge and skills, decision-making and structure**

Confidence was explored initially only because it was mentioned so very often in the accounts about the latter period of service's development. The increase in confidence which all physiotherapists experienced, seemed very important to them. It also seemed to be a significant influence on the way they practiced physiotherapy, and how satisfied they felt with themselves as professional people.

Confidence is treated here as a personal quality and defined as being full of "self-assurance" or "self-reliance" (The Shorter Oxford Dictionary 1973) in relation to work. In spite of confidence being a noticeable quality of many professionals, it had, surprisingly, not come to light in my literature searches about professional type of knowledge and skills.

### **Evidence**

All twenty-one interviewees thought that there had been a marked increase in confidence in handling clinical and managerial problems. The physiotherapists felt that this growth in confidence, which had begun three years earlier with the making of the development plans, had increased markedly during the year preceding the interviews.

"Lack of confidence" had been described as a major deficiency of the technician period. "We weren't confident. We were always looking for permission from the consultants to go ahead with things. Clinically, I think people did what was safe - not necessarily what was best."

This had changed to, "We are much more confident now as a service. In particular clinically, there is a great deal of confidence which had not been there before."

About half of the group of interviewees (ten) used a particular example to illustrate increased confidence. The example centered on treating a patient only when treatment is likely to be of value to the patient, rather than doing "what is safe" for the professional. The latter had been the preferred action during the technician period.

" "Now we are more confident. We have the courage to say to patients, "I can't help you," which is more difficult than saying, "I'll just try something." Now we do what is best. It might mean doing nothing." "

The above quote refers to the difficult ethical issue which professionals often have to face. Professional codes of practice prohibit treatments which the professional knows to be of no value to the patient because giving the impression of value by treating ("doing something") when there is no value, deceives the patient. Yet, professionals also have a "duty of care" i.e. an obligation to provide treatment, to help wherever possible. As not fulfilling this duty may result in litigation, this increases the pressure to treat - "to do what is safe" and "not necessarily [to do] what was best;" to "do something rather than nothing".

The physiotherapists were aware that their new clinical confidence was based on increased competence.

" "We are confident because we are competent...We say to the patients now, "this is what is wrong. Go and tell the doctor..." And we are confident that they will listen to that...It helps that other professions are more willing to say, "Physio says, you have got this and this, so it's right"...Our professional standing has improved. Most of the physiotherapists here are so well trained they know what they are talking about."

We can also glean from the excerpt that the physiotherapists' confidence was bolstered by other professions "having confidence" in the physiotherapists' competence - their competence being acknowledged. The medical profession took the physiotherapists' clinical judgments seriously.

It also seems that the physiotherapists now functioned as diagnosticians "for" the doctors. And although this is not directly reported here, as the manager of the service I knew that the orthopaedic surgeons referred patients who suffered from backache to the physiotherapists for diagnosis. This led the physiotherapists to complain that the orthopaedic surgeons "were no good at diagnosing backs".

The next excerpt repeats the earlier link between confidence and competence, but adds a new link. Team structures are organizational arrangements which make access to advice easier, thereby increasing confidence.

"Confidence is definitely related to skills, and patients always know when you are not competent. But your competence depends on whether someone is there for advice. I know what I am doing, but I also know which person to go to for advice. My confidence has increased because I was properly organized within a team and that gave me more confidence. There was always a senior who could give advice. And then there were also the superintendents and E. and you. There was a whole line for advice. No physio was

stranded. In the other service, I had worked in isolation. It took me a while to find out who my senior was... Here I work in close co-operation with the seniors and we discuss things on a day-to-day basis. We have regular meetings .That gives you confidence because advice is always available.."

The specific link between confidence and structure was the availability of advice from more experienced senior staff. Although this is not reported in this excerpt, the earlier data about team functions had shown that "knowing one's colleagues well" made it easier to ask for help and advice. This was now confirmed, as the excerpt below shows.

"I feel more confident because I know that if we have a problem there would be support and there is a line to change things...I felt that I wouldn't be so worried in the future because I could ask her...And there was always somebody to explain things...Here you are actively encouraged to have that rapport. It's due to communication. There is a two-way rapport here, which gives people a lot of confidence".

The education function of the teams was also specifically associated with confidence. Although this is in some way a repetition in the account of team communication, it is worth quoting separately because the excerpt portrays the informality and ease of communication in the specialist teams and how this was associated with levels of confidence.

"We used to work in total isolation and so you could never check out with any colleague whether your treatments were alright. I sometimes phoned L.Z. to talk about this but I didn't know them [other physiotherapists working in the same specialism] all that well. So, it was difficult. Now we meet to discuss clinical cases and you can bring your problem to the group. It's very reassuring and it makes the physios more confident because you have checked it out. Sometimes someone will say, "I don't understand it." And then someone in the group will say, "oh, I do." That's what brings the confidence - discussing it with those who work in the field."

The quote confirms the value of the teams, which, as the earlier excerpt had told us, went beyond the strict boundaries of the team. It included the superintendent and district physiotherapist who were also seen as a "line of support". However, here, a particular form of communication: "two-way rapport" (dialogue) was mentioned as a process which raises levels of confidence.

The growth in confidence was not limited to clinical decision-making. More confidence in handling management issues was also reported. A key event which appeared to have triggered new levels in confidence were the development plans.

"Previously you didn't get the opportunity to make managerial decisions. The opportunities certainly weren't there in my previous job. I became confident in making managerial decisions because I made decisions. It came about because there were a lot of people changing things...Everybody seemed to have projects to change things when I came. It's this sort of climate and there is a challenge and the physios are very confident that they can change things...There is an increase in confidence by knowing about management."

This excerpt also makes a link between practice (having the opportunity to make management decisions) and confidence. "Doing it" generates confidence in one's ability to do it.

Producing success was also important for generating confidence. The first successful project ("a great success"), which spread confidence throughout the service had been the development plans. And the success of the development plans generated the confidence to take on "bigger projects".

"Making the development plan gave people confidence. We were very pleased with ourselves when the development plans had been made. It was considered a great success. Then people took on other projects - because it had been successful. If someone is involved in a project and they do well then they take on a bigger project because they have the confidence to do it."

The majority of the interviewees (eighteen) thought that the making of the development plans had especially increased the levels of confidence of the "younger physios".

"Making the development plans gave people the confidence to take on other projects. If someone is involved in projects and they do well then they take on bigger projects. The basic grades benefitted because they were involved in making the plans." "Making the development plan - the process of writing it - gives the younger physios the confidence that they are doing the right thing."

A few interviewees (five) were aware of the transfer of confidence to other areas of work and projects.

"I think it has also helped with confidence in different situations. ...You feel something has happened and it has worked and you have had a bit of success. So you are prepared to go on and stretch yourself. Now I have the confidence to go for more things...before I didn't do that."

Finally, all twenty-one interviewees thought that "the fights with the medical profession" had increased the confidence of the whole physiotherapy service. "Round 1" occurred when "the cuts" had to be made. As discussed earlier in the data about "the cuts", the physiotherapists had been asked by me to determine the levels of work they could handle. But the consultants felt that they had "the right" to say which of "their patients" should, or should not, be treated. However, in spite of their protests, the physiotherapists continued to determine their workloads based on the careful criteria described in the data section about the cuts.

The "second fight" was with a chest physician who challenged the physiotherapists' right to determine who should be treated and by which means. To convey the message that the physiotherapists were not professionally competent an article about the "uselessness of physiotherapy" for a particular chest condition was produced by the chest physician. The physiotherapists' reply was to produce research evidence to the contrary, which showed that the article published in the British Medical Journal was flawed. The physiotherapists' reaction to "winning the fights" is described in the excerpt below.

"Fighting as a group increases confidence. We all got together and discussed things and we got practiced in defending ourselves when the doctors revolted against you because of the cuts...And then the "Dr. S. affair". That was important because he didn't get away with what he wanted. He thought he could lay forth on research, but you showed him that he was talking rubbish. He didn't admit it though. He should have apologised but he is a "little man". It was a brave stance to start with but it gathered momentum. If you have got something that really matters then it's nice to see people pulling together. Winning it, gave us a lot of confidence."

## Summary

- The interview data provided ample evidence that the physiotherapists perceived themselves as a group of confident professional people.
- The physiotherapists felt confident to handle clinical, as well as managerial problems.

- From the point of view of professionalism and professional practice it was highly significant that the physiotherapists now had the confidence not to treat where patients received no value from being treated.
- The perception of having produced success in the past was associated with their present high levels of confidence.
- Confidence was associated with the physiotherapists' own perception of being competent professional people.
- Confidence had not been identified as a quality or skill in any of the typologies.
- It was not clear at this stage whether confidence should eventually be categorized as a professional quality or skill.
- Confidence appeared to be seen by some interviewees as a "driving force" for the development of new skills.

### **Decision-making and organizational structure**

- The data were useful evidence about the organizational structure of the physiotherapy service and the operating characteristics associated with team structures:
- Confidence was associated with being in a team, and in particular with:
  - having access to advice from experienced professionals;
  - being able to discuss professional problems in a team, in order to gain reassurance;
  - having ready access to education which enhanced the physiotherapists' levels of confidence.
- Having the opportunity to be involved in decision-making increased confidence. Although this was reported as a factor which increased confidence, the opportunity for decision-making was generated via the team structures and the devolution of decision-making to clinician level (the middle layer of the organization).
- Being in a group as an entire service and organizing to meet the challenge of the medical profession produced a feeling of confidence because of the successful outcome of the struggle. Taking up the struggle with the medical profession required confidence in the first instance, regardless of the outcome of the struggle.

### **Insights and preliminary discussion**

- The data provided additional evidence for physiotherapists functioning as diagnosticians, which is also crucial evidence for the assessment of professionalism in physiotherapy.

- This practice is a reversal of earlier decision-making where the doctors diagnosed all clinical problems and the physiotherapists accepted these diagnoses as the basis for their treatments.
- The data provide good evidence of the implementation of national policies at the local level.
- The interview data about decision-making and the operating characteristics of the team structures repeat information contained in the pilot data on decision-making (chapter two), where the mechanisms for consulting with colleagues had been described in detail.

## **CHAPTER THIRTEEN**

### **DISCUSSION AND CONCLUSIONS**

#### **Introduction.**

Practitioner research as a professional and manager - a special way of seeing.

The pre-research stage and its conclusions.

The first research stage and its conclusions.

The conceptual stage of the study.

The "knowledge track".

The "decision-making track".

The "new" contingency.

#### **Introduction**

Two major themes, contained in the outline of the initial management problem which had prompted this research project, emerged more firmly after the first empirical investigation and the literature reviews. One was the theoretical focus of professionalism: exploring the specific pattern of physiotherapy as a profession. The another distinct - but linked - theme was the "functional" manager's problem of how to implement (manage) professionalism in the practices of a physiotherapy service at district health authority level.

The management problem was of interest from the point of view of the politics of the professions, and contributes knowledge and understanding to those who manage professions in organisations - in particular in today's NHS which could be said to be conflict-ridden.

All of these research aims had been outlined in the research design. But - now - thinking back from the almost finished project to the original "impulse" to solve my management problems by doing research, a third contribution to the knowledge of the scientific community emerged. This contribution is to the methodology of practitioner research in the field of management which is based on my experience of conducting research from a distinct and complex triple role as researcher, manager and professional of the organisation and profession being researched.

At this stage, then, when the question becomes, "What does it all mean ?", it seems that the researcher/manager/professional had to fully emerge from the wings. The "view" based on the three roles, had to be articulated. It had to become part of "what it all means".



In this final part of the research project the questions and results of the pre-research and first research stage (the decision-making pilot) are thus put into the context of the views from my three distinct and integrated roles. However, this discussion is not pursued beyond the first research stage because nothing could be added to the discussion. The most important matter was to compare my view from the "pre-research" stage with having become a researcher - because such comparisons sharpened my view of doing research in the profession and organisation being researched.

This means that the discussion follows largely a stepwise and incremental fashion which reflects the actual process of research. It will be shown how each phase contributed to answering the research questions which were used to develop new theoretical insights to the study of professions and for managing professions in their organizational context.

However, after the discussion of the concept and theory of profession, which outlines the contribution of concept and theory to the progress of this research project, the discussion becomes organized around the key dimensions of the project: knowledge and decision-making (including the issue of organizational structures). These become known as "knowledge tracks" and "decision-making tracks" along which the various conceptual and empirical analyses were conducted.

To continue to convey the stepwise progression by which my initial management problems were answered through research, conclusions are drawn at the end of each discussion and the contributions to our understanding of professions, and how to manage them, are outlined.

### **Practitioner research as professional and manager - a special way of seeing.**

#### **The pre-research stage**

First comes the discussion of the initial phase - the pre-research stage and prompt to practitioner research. Using the idea of role and of the particular "view" from each of my three roles, how were the questions posed and answers arrived at during this pre-research phase ?

My early practical management problems were that the physiotherapy service suffered from a severe shortage of physical resources: accommodation, equipment and staffing. Clinical skills as well as the physiotherapists' social and management skills were poor and were

held to be responsible for the low status of physiotherapy within the health authority, as well as its professional isolation. The service was held to be "unprofessional" - a technician service - and the question was "how to make it professional", which was linked to national policy changes towards professionalism in physiotherapy.

The first three deficiencies outlined were shortages in the most basic resources of organisations: accommodation, equipment and staff. They were resolved very rapidly because the health authority granted extra resources for a new physiotherapy department, new rehabilitation equipment and additional physiotherapy posts.

Since it is a basic function of managers to organize resources for productive output, my early attention to resources might be seen as a typical response of a manager, which brings the manager role and view (contained in role) to the fore. However, a new physiotherapy department and equipment and more staff were also perceived to be highly visible early symbols of the service's new "importance". The idea of "importance" is reminiscent of earlier concerns over the low local status of physiotherapy as a profession, which introduces the second role and view into this early scenario - the "professional" role.

This "dual view" is typical of "functional managers" who constantly balance being part of a management structure of organisations with being a member of a profession. However, it will be shown later that, in spite of being a manager, all my early management initiatives - and successes - were firmly rooted in my views as a "professional". My point of view as a professional also informed the skill problem. The skill levels of the physiotherapy service were deficient for two reasons: firstly, not enough people were employed to do the work. And secondly, the existing posts were predominantly junior posts, which meant that only relatively inexperienced physiotherapists could be recruited. The aim was therefore not simply to get "more staff" in order to produce an "adequate" service, but to get experienced senior staff for a "good" or "the best" physiotherapy service.

The idea of "best service" is a professional rather than a management goal, based on the professional ethic and commitment to "doing the best for patients" whatever the circumstances. Managers might of course pitch production at the highest quality or "best service", but only if required by the market. This is why today's NHS "general" (rather than "functional") managers seem to be comfortable with the idea of producing what is "affordable", based on the governing principle of economic rationality.

However, at that moment in the NHS' history - the mid- and late eighties - a harmony of view between managers and professionals still existed. My commitment to "best" quality

was shared by the health authority who granted extra resources for new senior posts, and for "re-structuring" the service by upgrading existing posts. It seems therefore plausible to argue that the problem of basic resources was resolved, based on my professional view rather than on the basis of "economic rationality" ("contingency" (Torstendahl 1990)).

It would appear therefore that although one of my responses to the problem of low skills was re-structuring - a traditional management response - this initiative was nevertheless informed by my professional commitment to the service ideal - "doing the best for patients". Managerial "means" were used to pursue the professional "ends" of the physiotherapy service.

The education program - my second "management initiative" for raising and updating the physiotherapists' skills was resolved by the same principle. Managerial means were used to pursue professional ends, the two roles being used in an integrated and harmonious way. However, even at this stage, my research orientation and experience came to light, which made me think that even the initial stage of the research project had been - in some way - "research-based". On reflection it seems however that significant differences between this type of "research" role and my research role proper existed.

Firstly, the professional end and managerial means part of the argument. To offer "training" to employees who lack skills might be construed as a management response to skill deficiencies, but this initiative was also inspired by professionalism when we consider "how" the education program was compiled, which also determined the nature of its contents.

The education program was designed and implemented on the basis of an extensive staff survey whose purpose it had been to find out what kind of topics the physiotherapists were interested in. The staff were also asked to actively contribute to the program by giving lectures about their own work and about courses they had attended. This portrays a reflective approach - "research-based" approach - which is so typical of researchers and also plays a part in how professionals approach their work.

Because the clinician physiotherapists were only interested in clinical topics during this early period, I added "professional" topics (such as the clarification of my own role and the legal duties of professionals), as well as management issues (such "making a development plan"). I also added some lectures about monitoring and evaluating the service systematically through research, which was to make the staff more research-orientated and to prepare them for the later "research and evaluation group". This meant that the

education program was an integrated program of clinical, professional and managerial topics.

Focussing on my "view" as professional and manager also made it clear that the way I had organised the first changes in the physiotherapy service reflected how I saw my own role, which I call "the research-oriented functional manager role". This is a role which is in some sense very similar to the role which I was trying to "design as the "professional" role for the physiotherapists.

The "professional" role in physiotherapy was the "research-orientated managing clinician", which (like my own role) contained the role of clinical practitioner, a management role (organising the context to clinical work for "best service") and an investigative role. All actions were to be based on systematic investigation of clinical and managerial matters. The elements of these two "professional" roles were to have three elements: professional, manager and investigator (or researcher).

From what has been said before, the staff's involvement in "development planning" (my third management initiative) was an aspect of this wider professional role. Nevertheless, managing the context to clinical work was not confined to strategic planning, but at a later stage of the service's development - "the middle period" - short-term planning was added to the physiotherapists' managerial responsibilities.

The general pattern of my first three major "management" initiatives was therefore as follows. The "knowledge" required for these activities was "taught" by lecture in the education program, based on a search of the existing knowledge, which was undertaken mainly by me and my deputy as the main lecturers. However, the contents of these lectures were also discussed with the staff in post-lecture discussions, which led to additional knowledge being "created in discourse" (Svensson 1990).

This is why most of the documents about these projects (such as the development planning model) contained a "basic model", presented to the staff as the type of planning model I had been taught during my M.Sc. studies in social medicine. The staff's clinical knowledge ("knowledge of") and "knowledge about" practice, and their ideas about how the service functioned ("knowledge about") then merged in discourse and were then added to the documents. Because I felt that the actual experience of applying the planning model mattered, regular feed-back sessions were held, after which the model was adjusted based on the staff's experience of using the model.

To complete the discussion of the original management problems here, two of the problems mentioned in the original problem list were not solved at this early stage. The problem of "low status" and "professional isolation" were solved during the later "middle period" of the service's development. As the service became more competent, and was seen as "more professional", its status increased, which led to the physiotherapists being asked - or asking - to join the multi-disciplinary teams.

### **Conclusions - pre-research stage**

Using the "three ways of seeing" based on role leads us then to the following overall conclusions about this pre-research stage of the project and about this special practitioner research role.

Managing the service as a "functional manager" was based - not on two roles, as the term "functional manager" implies - but was "informed" by my own experience and skills of post-graduate research in social medicine. It contained a marked information-gathering and investigative component.

This role was labelled: "the research-orientated functional manager". The staff's role contained all elements of my role. This role has been labelled the "research-orientated managing clinician", which was seen as the role which is consistent with professionalism and with contemporary physiotherapy policy.

However, the balance of the three roles within the integrated overall role was different. The staff's role had a greater clinical component because their main role continued to be their clinical role. Nevertheless, my role had a clinical (professional) component, which were my knowledge and understanding of clinical physiotherapy practice and how it is organised. This was based on my experience as a former clinician. An additional and strong component was "knowledge about" how physiotherapy services functioned (my management experience).

From the employing health authority's point of view, professional knowledge and clinical experience made it worth their while to appoint "functional managers" at that time in the NHS' history.

If we consider the practical issue how to implement professionalism on the basis of these findings, the way in which I had tried to implement professionalism locally had considerable advantages.

In a sense, everybody was a manager - or leader - the more appropriate term for professional cultures (Handy 1985). It is just that some professionals had more scope to lead than others. But every member of the organisation/profession was leading - and was trained to lead via the education program and through "practising" leadership. This meant that management knowledge ("knowledge about" in the actor-based framework) became diffused with the wider professional role.

This is called "diffuse organisation" here. We have seen earlier in the discussion of professional politics that "organization" (Burrage 1990) is important "resource" in the hands of professionals. It is how they seem to become more powerful (Burrage 1990).

For example, looking at the history of the profession's emancipation, once physiotherapy became "organised" nationally under the state umbrella of the CPSM, its autonomy grew. This case study showed how a profession's power might become diffused at the level of professional "practice", where, as had been argued before by Burrage, research tends to be scarce.

From the point of view of theory, this study thus contributes to our understanding of profession in an area of scarcity of research by showing how one professional service organised itself in "practice" in a way which was congruent with national developments in professionalism. The strategy was the diffusion of "knowledge about" the intricacies and procedures of the profession.

The involvement of the staff physiotherapists in strategic planning was considered to be "highly unusual" in the profession. Nevertheless, some of the leaders in the profession (for example, a former physiotherapy advisor to the DHSS) felt that this practice was in the vanguard of professionalism in physiotherapy.

Analysing the means-end relationship of my "management" initiatives from the point of my triple role brought it to light that the ends of these "management" initiatives were consistent with professional rather than with essentially managerial goals. These goals were - equally consistently - pursued by managerial means - a practice I had been unaware of as a practitioner.

Nevertheless, at that moment in the NHS' history, pursuing professional ends within the NHS did not produce tensions between the state's economic rationality (Alaszewski 1978) and the professional aim of providing "best service". The local health authority had

"wanted a good physiotherapy service", which I interpreted from my professional view to mean "the best". And the health authority supported me in my pursuit of my professional goals.

If we analyse this finding by using the Kocka and Torstendahl concept of profession (which has been accepted as the working model for this study), it seems however that the power dimension (autonomy) and the traits (knowledge) were nevertheless driven by the contingency of economic rationality, but only in the sense that the state's economic rationality coincided with making physiotherapy more independent and more skillful. The analysis of the policy documents had shown the state's reasons for "regulating the profession" in this particular way was that autonomy was seen as more efficient. In this sense the state's economic interests coincided with the physiotherapy profession's interests, as the earlier policy analysis had suggested.

Finally, from the point of view of the original question posed in the outline of my management problem: how to implement professionalism. It seemed that "more diffuse organisation" based on a wider professional role, which was grounded in an extensive range of "knowledge about" the intricacies and procedures of the profession, might be a strategy for implementing professionalism in actual professional "practice". From our discussion of the concept of profession, this differed from earlier assumption in the "trait" literature about professionalism where the nature of a profession's "technical" (clinical) knowledge had been seen (at least by trait theory) as a factor which determines professionalism.

### **The first research stage**

The decision-making pilot was the first research phase. It continued, and contributed to, the three major themes of the pre-research stage. The first is the methodology of practitioner research and how this might influence what an observer is able to see. The second is that of professional "practice" and clinical decision-making. The study provides insights into how to structure professional services, and very importantly also, "links" knowledge and decision-making, the two key policy changes for professionalism in "practice".

As far as my triple role was concerned, it may have been reasonable to expect that the balance would have swung considerably towards my research role. But this was not so. Reflecting back over the entire process of research, it seemed that the relative importance of each role - its balance - remained as during the pre-research stage. The professional

ranked highest; the researcher ranked lowest; and the manager continued to occupy the middle rank.

It was the nature of my research role which changed markedly in comparison with the pre-research stage. The main difference was the degree to which I had to negotiate my own self-consciousness. Reflecting now from the greater distance of having left the profession and the NHS - the issue of how the self-consciousness of professionals might impact on the research role surfaced in a marked way.

This has been my experience. Tutors "persuade" their practitioner research students to observe their professional/managerial work (which is the subject of research in practitioner research) in a more detached and critical way. But this is challenging and confronting - and often painful - because of fundamental attitudinal differences between professionals and researchers.

According to Burrage, professionals "protect" their professional community from their ethos of loyalty to the profession; but academics and the "research-branch" of the profession "expose" the practices of their profession. Thus, when the two roles become one, the professional role can produce tensions which might inhibit the demands for (self)-criticism of the profession and the self as the professional. The self-consciousness of the professional inhibits the research role in the same way as the self-conscious researcher might be inhibited by an unco-operative informant (as described the methods chapter).

This meant therefore that the essential ability of being more self-critical of my practices as a manager and professional - being less self-conscious as a professional and manager - had to be learnt. A special skill in this reduction of self-consciousness was to learn to be more "openly critical" in the presence of an outsider who shared with me the critique of my practices as a professional and manager.

This way of "being" a professional, researcher and manager was therefore quite different from the research type of activity described in the pre-research stage, where problem-solving had been based on a conceptual and information-gathering approach, rather than the severely critical stance which might affect professional and managerial identity.

This self-critical "sense" is a different kind of "truth" from the "truth of science", but such experiences often spark off the search in the more investigative ways of science. Since the self-consciousness of professionals doing practitioner research has been highlighted as a problem, not only here but in the research literature (Easterby-Smith, Thorpe and Lowe



1991), how to overcome it might thus be a useful future research project for students of practitioner research.

Having thus clarified the point of view from which the research questions were posed and answered, it now remains to discuss how this research phase contributed to answering my theoretical question about specific patterns of professionalism and the linked management question of how to implement professionalism.

It had been said earlier that the decision-making pilot contributed to my knowledge of professional "practice" - clinical and managerial. Firstly, the decision-making study clarified how it is possible for professionals to shoulder their difficult and complex clinical responsibilities in a professional way. The solution was to build flexible, self-generating "organic" structures which provided access to experienced practitioners.

The point of tension with regard to this issue were the responsibilities of the basic grades who, because of their lack of experience find these responsibilities particularly difficult, in spite of being fully trained. The problem lies in their lack of experience of clinical practice, in a situation where sound professional judgment based on experience is required. Thus, having a system through which advice was readily available - primarily within the specialist team structure - enabled the service to cope with the complex issue of professional responsibilities. Clinical professional practice (having "professional" responsibilities) became competently organised around "organic" structures.

The issue of professional responsibility for clinical work also advances the discussion about the "professional ends" - "managerial means" relationship because it is yet another instance where services was structured in such a way that professional responsibilities (professional ends) were met. Nevertheless, although this means-end relationship had been a surprising finding in relation to my so-called "management" initiatives, I was less astonished about finding this relationship manifested in the clinical area. In some sense, there is no terrain of a more professional nature than providing clinical treatment as determined by the knowledge and skills of the professional community.

If we then look at the same findings from the point of view of a manager, the study was useful in showing how managers can organise a professional workforce if professional ends are an acceptable goal for the organization in which professional practice is carried out. The tool in the hands of managers is their ability to structure the service in an "organic" way. Structures and processes for consultation need to be available to those who need

advice. Professionals require advice from their peers because the problems are difficult to solve.

And finally, from the theoretical perspective, professions which organize practice in such a way that the scope for clinical mistakes is minimized, are likely to increase the status and power (autonomy) of the profession. We know from the main interviews (reported in chapters ten, eleven and twelve) that the esteem in which the physiotherapy service was held grew with its perceived "competence". Once the physiotherapists were seen as competent practitioners by the medical profession, conflicts over clinical autonomy largely ceased.

This seems to convey a link between the level of clinical (technical) knowledge ("knowledge of"), the expertise in applying this technical knowledge competently ("knowledge about" clinical practice) and the service's degree of "organization" ("knowledge about" the managerial procedures). It seems thus that there is a dynamic and reciprocal relationship between the two types of knowledge, which at the macro-level of the concept of profession have been labelled "properties" and "strategies".

Secondly then, managerial decision-making. The research-based data about managerial decision-making largely relate to the staff's involvement in "development planning" (discussed initially as a "management initiative" of the pre-research stage). Looking back on the data about managerial decision-making, it seems that the arguments for the staff's involvement in strategic planning still stand. The staff's participation in management responsibilities represents more "diffuse organization" from the point of view of professional strategies. From the management perspective, the idea of self-organising organic structures show managers a particular way of managing professional in organizations and of implementing professionalism.

However, two additional aspects about organizing and managing professions emerged. The first was the significant role of the basic grades and of other staff at the lower end of the organizational hierarchy; the other was the link between participation in decision-making and the staff's levels of knowledge and expertise. Decision-making and knowledge were linked in axiomatic theory, as well as in the actual policy changes which determined physiotherapy practice.

First, the basic grades. They enjoyed a highly unusual degree of influence in the local setting because of their involvement in strategic planning. They were involved in strategic

planning in the same way as any other team member. They "led" a project team, based on any special knowledge relevant to that particular project.

The significance of this reversal of hierarchy was twofold and is important as a professional strategy. From the point of view of professionalism, Johnson (1972) designated "collegiate" organization as the form of organization which is most typical of and appropriate for professions. Professionals largely relate to each other as colleagues - as equals. This is so, in spite of new members having to be trained to become fully competent practitioners. All professions have "apprenticeship" systems specifically for this purpose.

In this sense hierarchy is ultimately foreign to professional cultures. It is nevertheless forced onto professionals because they work mostly in organizations which adhere to the principle of bureaucracy, and thus hierarchy. My highly organic mode of organising the physiotherapy service might thus be seen as an attempt to introduce a professional element into physiotherapy organisation.

The shape of physiotherapy services in the NHS was largely determined by the state (in the form of Whitley Council regulations) which laid out the organisation of physiotherapy posts in a hierarchical way. This was the basic structure of the local physiotherapy service which was at the same time fundamentally changed through the allocation of tasks which were considered to be the appropriate tasks of those at the top of the organisation.

Another "professional" element was thus added to the pursuit of professional ends by managerial means. As the "functional" manager of the physiotherapy service, I persistently pursued professional ends using managerial means.

Very importantly, from the perspective of the value of practitioner research and the quality of this analysis, this had only come to light when the analysis of the data was synthesized with the context of data collection - my special and simultaneous role as professional, manager and researcher.

The second new issue of significance which emerged at this stage was also connected with the basic grade's role. This was the link between knowledge and decision-making in "practice".

The reason for the basic grades' influence was their knowledge: "new" clinical knowledge or knowledge of "new" management techniques (such as the POMR system) which they may have encountered during their clinical secondments as students. Knowledge was highly

valued, and using the basic grades' "new" knowledge was seen as a valuable resource and a means to the local service becoming a leader in the profession.

During the reporting of the data we had come across much evidence that knowledge was valued very highly by me because of my academic training and by the staff because this idea had been communicated to them during the education sessions. Hence, the "well-constructed case" - constructed on the basis of clinical knowledge and management principles - had become the basis of management planning.

### **Conclusions - first research stage**

Knowledge was also constantly scrutinised by "reflection-in-action" and "reflection-on-action" (Schon 1983) and "discourse" (Svensson 1990) in the teams and networks. Knowledge was clearly seen as an essential "ingredient" of good decision-making. It was used "for" decisions making; tested through reflection and discourse. Actions (decisions made) were modified on the basis of revised knowledge, and knowledge was revised on the basis of reflecting on action. In this sense theory and practice merged.

The first overall conclusion of this discussion of the first research stage is about the methodological issues of doing practitioner research in the organisation managed by the researcher and in the profession of which the researcher is a member.

Comparisons between my triple role during the research stage and the pre-research stage showed considerable similarities in both roles, both in terms of the its three components and - rather surprisingly - in terms of the overall balance of these components. My intuitive - but experience-based - ranking of the three components of role remained throughout: professional first; manager second; and researcher third. It seemed that the "professional" roles in physiotherapy: my role as "research-orientated functional manager" and the staff's role as "research-orientated managing clinicians" were almost identical - more a matter of balance than of content.

Research (or investigative activities) seemed a "natural" part of professional roles- an idea which is acknowledged by those professions who have been able to build post-graduate training and career structures. For example, in the medical profession "doing research" is the step after qualifying as a specialist by becoming a manager of the Royal Colleges, and before becoming a consultant.

Nevertheless, reflecting on my triple role brought to light a potential problem for practitioner research where the practitioner is also a member of the profession being researched. The "protective consciousness" of professionals might, as we had seen from Burrage's work, make it difficult for professionals to operate in the sufficiently "openly critical" manner required by research.

Although the danger of excessive self-consciousness has been highlighted in the methodology of single research roles, my extensive literature searches of research roles of this special kind of practitioner research showed that this problem has so far not been discussed. My discussion of doing research in this situation, its insights into the process and adaptations in data collection, and data interpretation therefore represent a unique contribution to the methodology of practitioner research in the field of management. Given the shift in professional self-consciousness which I "felt" had occurred - a change which remained unexplained - it might be particularly important to explore "how" and by what means (or techniques) these important shifts might be achieved.

This seems particularly important when we consider the important - and additional insights which emerged from analysing the results from the point of view of each of the roles contained in the overall role.

My analysis from the "three points of view" brought to light that - in this case study, at least - my goals as a "functional manager" were consistently "professional"; the "means used" to achieve these professional goals were largely "managerial". Nevertheless, the extent to which this pattern is a general feature of "functional management" needs to be explored further through research.

The second overall conclusion is about the theoretical aspect of professionalism, and within that overall theoretical context the issue of professional "practice". Although the initial data were limited (being largely based on as pilot study), they were confirmed by the data from the main empirical study, which adds to the "goodness" (Sekaran 1984) of the data.

"Practice", as we know from earlier discussions of the theory and concept of profession, is an area of scarcity in the study of professions, which is why this part of the study, and its follow-up in the main study, makes a special contribution to the study of professions.

The decision-making pilot contributes to an understanding of local practice, ((as opposed to the of policy-making (institutional) context)), by showing how "organization" in the sense which it is used in the actor-based framework, became more "diffuse" in local practice.

The local mechanism used was to make organisation more dense though self-generating, organic team and network structures.

At the clinical level, this solved the tricky problem of meeting the professional practitioner's ultimate responsibility for clinical standards of work when some inexperienced practitioners might - as yet - not be fully competent to meet the burden of these complex and often difficult responsibilities.

However, the most significant - and highly unusual - mechanism for "diffusing" "organization" throughout the service was the delegation of strategic planning to the middle stratum of the service. This is the organizational layer where the most expert clinical knowledge ("knowledge of") and expertise ("knowledge about"), and understanding of how the service is delivered ("knowledge about") resided.

From the point of view of implementing professionalism this seems to have been the key strategy for "making a professional service happen". The reason for this was that the diffusion of "organization" was associated with the diffusion of knowledge throughout the service because the physiotherapists were the "actors" who acquired knowledge ("about") and understanding through their actions. Knowledge grew with the opportunity to practice "organizing" because more opportunities for better organization were identified on the basis of better knowledge.

It seemed therefore that "organization" resided in a combination of clinical knowledge and expertise (clinical "knowledge of" and "knowledge about") - being able to make a good case on sound clinical grounds - and understanding how the context to clinical work should be organised to best effect ("knowledge about" organizing the service). And a particular aspect of this second aspect of knowledge, highlighted in the main empirical study, were the political skills and experience to negotiate with other local interested parties. Communication was seen as a key professional asset.

Typically for the two parties (the DHSS and CSP) who negotiated greater professionalism at policy level, the solution to implementing professionalism in physiotherapy practice was essentially a bureaucratic measure. It took the form of a senior manager post (the district physiotherapist) - a management post located at the top of the physiotherapy hierarchy. From professional point of view, having the district physiotherapist post can be interpreted as gaining a professional leader. But this remains nevertheless a hierarchical solution which had not been backed by DHSS/CSP recommendations of how to "diffuse" professionalism throughout the local practices of the profession. From the professions' point of view, such

recommendations may have led to a greater dissemination of professionalism throughout the NHS.

From the theoretical point of view, the decision-making data also showed for the first time how levels of knowledge and participation in decision-making might be linked in the professional practice of physiotherapy.

This link between knowledge and decision-making, established in these research data from the perspective of axiomatic theory, mirrors the dynamic relationship between the "properties" and "strategic" components of the concept of profession. It seemed that the "properties" of profession (essentially knowledge) and the strategies (essentially decision-making) linked in the concept and in axiomatic theory, become linked in practice through more diffuse "organisation". More diffuse organization (manifested in a wider range of decision-making) was based on, and also produced, more professional knowledge (a wider range of professional knowledge); more knowledge was associated with more decision-making (less "centralisation" in axiomatic theory).

The third and final conclusion of this first research stage is about managing professionals in organizations. Functional managers use managerial means to achieve professional ends - which enhances professional power. They consolidate their power by building organizational structures - an essentially managerial tool which is used to a professional end.

Whether this is seen as a legitimate or desirable way for functional managers to act, depends on who is looking. This, in turn, depends on the "contingencies" which had been identified as the state's economic rationality (Alaszewski 1974). At the time the study was carried out, it appeared that, based on the analysis of policy - and now also from the analysis of local practice - that this was seen in the NHS as a legitimate and desirable way of managing professionals.

But this changed dramatically as the NHS reforms, which started with the Griffith reforms in 1984, progressed. Professionals have become - in some way - "accountable" to "general managers", rather than to "functional" managers. Professional "ends" (clinical goals) are increasingly proscribed by the state's economic rationality (Alaszewski 1993) - an issue which will be discussed in more detail in a later part of these conclusions.

## **The conceptual stage**

The next phase of the research project was an intensely conceptual stage through which my practical questions were ultimately answered in theoretical terms. It was also at this stage when the project received its dual focus: aiming to establish the specific pattern of the profession (its theoretical focus), and linked to this was the practical quest for a set of recommendations ("strategies") of how to implement and manage professionalism in physiotherapy.

At this stage the seemingly simple key question, "What is a profession or professionalism?", which had followed my observation of physiotherapy policy and my "management initiatives" to implement professionalism, became an inquiry into the concept of profession and its role in a new theory of profession.

Typically, my inquiries into theory and concept also gave "direction" and "order" to the initially "messy" research problem - which is so typical problem of practitioner research in the field of management (Sekaran 1984; Easterby-Smith, Thorpe and Lowe 1991). From the basis of the concept of profession (what a profession is) my investigations became inquiries along three "tracks": "the knowledge track"; "the decision-making track" which includes the discussion of issues of organisational structure.

"Direction" (what to look for) was firstly given to the project by exploring the possibilities of a new theory of profession (Burrage 1990), where "professional practice" was identified as a special gap in theory. Theory-building needed to be "grounded" in the exploration of professional practice, rather than being based in the study of professional "institutions", as it so frequently had been (Burrage 1990).

My initially practical management inquiry lent itself to the theoretical aim of analysing "practice" in a natural way. Nevertheless, exploring practice needed to remain an aspect of theory-building, which required a sufficiently "concretely grounded" concept. Hence, the use of the actor-based framework. Although the inquiry into the concept and theory of profession was thus "grounded" in the analysis of "practice", the overall theoretical aim remained. This was to fathom out the specific pattern of physiotherapy as a profession.

The concept of profession (what a profession is) had not been clear during the pre-research or first research stage (the decision-making pilot). This is why implementing professionalism had been based on a rather vague notion that professionalism "had



something to do with being more knowledgeable, more competent and having more freedom from medical interference".

However, at this stage, "What is a profession and what is professionalism ?" was clarified beyond the level of intuitive understanding. The new concept of profession by Kocka (1990) comprises essentially a "combination" of two elements: "properties" (like knowledge) and "strategies" (expressed in decision-making). "Strategies" include an "institutional" factors (such as the role of the professional association), which is usually seen as the "strategy-maker" of a profession.

This part of the concept, to which Torstendahl's concept of "contingencies" was added later, prompted the two major conceptual and empirical investigations into two key dimensions of professionalism. These were the nature of the knowledge and skills system which professionals use in practice (the "knowledge track") and the nature of decision-making (the "decision-making track"), of which the question of organizational structures is an aspect.

### **The "knowledge track"**

The "knowledge track" contained three major inquiries and is structured around types of knowledge contained in the professional role: clinical (technical), managerial/professional - plus an additional inquiry into "non-technical" and "other" knowledge which emerged initially from the literature based on Schon's work. However, new professional knowledge and skill categories emerged, resulting in the possibility of other kinds of knowledge expanding the existing professional knowledge and skill system.

Knowledge had been, from the beginning, one of the key dimensions of my inquiries into professionalism, to which two of my initial management initiatives (the education program and re-structuring) tried to address themselves. Re-structuring was done to raise skills by slotting more senior staff into the structure of the organisation. The education program was instituted to raise levels of knowledge and skills through teaching and discussion.

The ideas upon which these management initiatives had been based were identical to my ideas about the new professionalism and the new professional role. Professionalism meant functioning as a competent and sophisticated practitioner who evaluated practice and shaped the environment in such a way that good clinical (technical) services were delivered.

First, the "technical" (clinical) knowledge inquiry. This first line of inquiry was conceptual and showed that the "technical" knowledge and skill systems of professions are based on "substantive", "competing" and predominantly "scientific" theories which are "exclusive" to each profession. Because these theories are used for "immediate practical problem-solving", they are constantly modified by insights gained from professional practice. This makes the theories used by professionals intensely "practice-orientated" and also stressed the ongoingly analytical (experimental) nature of their work.

The last attribute (analysing) explains the research-orientation of professionals, which I saw as a particularly important goal of the physiotherapy service. Professional work being essentially analytical and experimental means that this mode might be carried forward to an intensity where evaluating practice "systematically" through research becomes part of the professional knowledge and skill system. And this is exactly what happened the local service. Research is in this sense a "natural" partner in professional work, as envisaged in the "research-orientated managing clinician role".

Physiotherapy was then tested first against this particular knowledge and skill system, using documentary evidence about physiotherapy "practice". The result of this "national" overview of "technical" professional knowledge showed that physiotherapy lacked a "general theory of physiotherapy" which perhaps detracts most seriously from its knowledge system being defined as professional. Physiotherapy still lacks a "substantive" exclusive body of theory of the applied science level (Schein)) which underpins the practice of fully professionalized professions.

Nevertheless, evidence for theoretical development was plentiful. The components of a "general theory of physical therapy" had been thought out in the USA. Competing theoretical "approaches" were used in some physiotherapy specialisms. Research had been identified by the profession as the vehicle for developing a general and exclusive theory of physical therapy. Most encouragingly, the profession was aware that the medical profession's research paradigm was largely inappropriate for research into physiotherapy. The case study method had been chosen as the research paradigm for physiotherapy.

If we then take the development of a general and exclusive theory as an important hallmark of professionalism, my assessment of physiotherapy practice resulted in a judgment that practice was reasonably, but not fully professional. Nevertheless, given the complexity, problems and confusions of past literature about the knowledge and skill systems of professions and the neglect of the analysis of professional "practice" made it difficult or

impossible to say whether any profession - even the "fully-fledged" ones - would pass this test of full professionalism.

This study contributes to our understanding of professional knowledge systems by extracting the knowledge "traits" of professions from the vast and confusing literature, and by describing these traits "as a system". However, its major contribution is testing the extent of professionalism of physiotherapy practice.

The second line of inquiry along this "knowledge track" about "technical" (clinical) knowledge was therefore about "practice" based on data about local clinical practice from the main interviews. These data showed that clinical activity was firmly rooted in the analytical (professional) mode and that some physiotherapy specialisms used "competing approaches" (theories). Theories of other scientific disciplines, such as biochemistry (basic science theory), were used. The density of local specialisms contained in the learning structure of the specialist teams indicated a high level of knowledge.

The investigative (analytical) approach was flourishing locally, and had become "systematic" with the establishment of the local research and evaluation group. Practice was theoretically-based, learning-orientated and investigative.

All of this was good evidence that local physiotherapy practice was consistent with national physiotherapy trends and with the aspirations expressed by some of the leaders of the profession. And the evidence seemed all the more "weighty" when we consider the possibility that the theoretical content of practice may have been under-reported (Svensson 1990). Nevertheless, it was likely that any under-reporting would have been recognised by me as a former physiotherapy clinician.

The overall conclusion about this first technical (clinical) aspect of the knowledge track is therefore as follows. Although a "general theory of physiotherapy", which Krebs and Harris (1990) considered a hallmark of a high degree of professionalism, seemed to be lacking, physiotherapy research, based on its own distinct paradigm, - the tool with which theories are built - was flourishing, locally as well as nationally. Competing approaches (theories) were being used and the approach to professional problem-solving was fundamentally analytical and ongoingly experimental. In the local scenario this analytical approach became systematic through the evaluation of clinical practice, which was intertwined with using "management knowledge" to evaluate the quality of clinical services provided to patients.

The second track in the context of my inquiry into the knowledge and skill system of the physiotherapy profession is thus "management knowledge". Management knowledge had been part of the inquiry from the beginning because I saw management as part of the new professional role and consistent with the new professionalism in physiotherapy. Hence, management education and training had been included in the education program.

In the trait literature about professional knowledge systems management knowledge (organising the context to the "technical" task) had not been included as a trait. Neither did it feature in the definitions of professional knowledge systems following the SCASS reviews. It is however an aspect of the actor-based, where it is called "knowledge about" the intricacies and procedures of professional practice and where it becomes a "resource". This means that "knowledge about" is used as a "strategic" tool, rather than a "property".

The decision-making pilot, as well as the main study, provided much evidence that management knowledge was used in practice. However, it had been evident from the time of the decision-making pilot that both types of knowledge ("knowledge of" clinical (technical) matters and "knowledge about" organising and managing the context to the clinical task) were linked in practice. The evidence had also shown that were linked in such a way that one type of knowledge influenced the quality and the use of the other.

The use of clinical knowledge in planning physiotherapy services had been the reason for involving the clinicians in planning. Hence, both types of knowledge had been included in the actor-based framework which guided the data collection.

The actual results of the data collection confirmed my expectations which were based on the pilot study and my experience as a physiotherapy practitioner. Managerial knowledge helped to refine clinical thinking, and clinical knowledge influenced managerial thinking. As one of the documents about the stroke unit showed, clinical knowledge about stroke patients served to plan a stroke unit; and, in turn, clinical goals were defined more clearly through management techniques of how to set goals for groups of patients.

Modifying the knowledge component of the actor-based framework, and its results, therefore contributed to our understanding of professional knowledge and skill systems. It showed that the purely "technical" knowledge base is too narrow and inconsistent with a fully professionalized role. Moreover, it seemed from these limited data that each type of knowledge influences the other. "knowledge of" and "knowledge about" were used in local practice in mutually inclusive and beneficial ways, in particular as the data had also shown

that managerial thinking was enhanced by the "transfer" of professional (technical) thinking to management activities.

The third inquiry along this "knowledge track" was knowledge which deviates in some way from the "technical domain" and "technical rationality" upon which the earlier first two aspects of the professional knowledge system (clinical and management knowledge) are based. The knowledge and skills in this category are in some sense special or new. Adding these types of knowledge to the professional knowledge system in physiotherapy - on the basis of data - widens the professional knowledge and skill system beyond the technical domain ("knowledge of") and the management knowledge ("knowledge about"), and contributes entirely new and important types of knowledge. It thus enhances our understanding of professional knowledge systems.

The first skill identified (which is in the technical domain) is not described in the literature as part of the professional knowledge system. It is the ability to "transfer" a skill learnt in one area to a different area of work. Evidence for this "generalizing" ability was particularly plentiful in this case study. It had come to light in many types of activities. And although the ability to generalize is a basic skill in a profession's technical domain, being able to transfer this skill to the non-technical domain of the profession - to managing the physiotherapy service - was considered to be a particularly sophisticated skill - a skill over and above the ability to generalise from one clinical case to another. It is "higher" and more "general" skill, which in the context of the general thrust of my arguments about professional type of knowledge is worthwhile drawing attention to.

This is particularly poignant when we remember that in axiomatic theory, as well as in the literature about professional knowledge systems, "more general" (such as a "general" theory of physiotherapy) is taken to indicate a higher degree of professionalism.

Highlighting this finding was also important because another category found in the data (but not part of professional knowledge systems) revolves around the ability to generalise. This is breadth of knowledge, which was also considered to be a particularly sophisticated skill - a skill over and above the ability to generalise from one clinical case to another.

The physiotherapists' accounts provided much evidence about the breadth of knowledge in professional practice, which, based on the data, is labelled in the typologies: "knowledge of the knowledge of other physiotherapy specialisms" and "other professions". There had been evidence also that the physiotherapists were able to use the knowledge of other professions (e.g. biochemistry) to analyze physiotherapeutic problems in their own work. On some

occasions, the knowledge and skills of another specialism were combined with the physiotherapists' own specialism to solve particularly complex clinical problems.

Interestingly, the physiotherapists associated breadth of knowledge with professionalism, and lack of knowledge about other specialisms with "technician physiotherapy". Their explanation was that professional physiotherapists had a greater ability to "see the relevance" of the knowledge and skills of other specialisms. Technician physiotherapists were unlikely to have the intellectual skill to detect these links or overlaps in specialisms.

Breadth of knowledge seemed important in today's world of work, given the highly sophisticated scenario in which some professionals work. To take a medical example, a physician specializing in renal dialysis, a biochemist and a physicist may try to solve a problem in renal dialysis by discussion. This requires the ability to "tap into" the knowledge and skill system of the other profession to a "sufficient degree", in order to establish common understanding and to solve the problem.

We had also seen the practical advantages of being able to tap into the knowledge systems of other physiotherapy specialisms. A mentally handicapped patient suffering from backache was jointly treated by a physiotherapist specializing in the treatment of backache and a physiotherapist who was an expert in handling this behaviourally problematic patient. A mentally handicapped patient who was referred to an out-patient physiotherapy department without "his physiotherapist" (specializing in mental handicap) may not have received any treatment for his backache beyond a "first attempt" because the out-patient physiotherapist may have found it impossible to "handle" this behaviourally difficult patient.

The idea of multi-disciplinary discussion and problem-solving bring us then to another aspect of the knowledge and skill system used in physiotherapy. This is the ability to communicate in a special way - "discourse" (Svensson 1990) - in which a special way of communicating produces new knowledge.

In the main interviews the physiotherapists' new ability to communicate "openly", "fluently" and "with confidence" had been a much reported phenomenon. We might call this "organic communication" because it had first been described in my interpretation of the pilot data on decision-making, based on Lickert's typology of organizational systems.

We may look at this valuable skill in two ways. Firstly, the ability to communicate freely, openly and with confidence seems to have been the "vehicle" for change. Without this type of communication the team structures may have been "dead" organisational structures,

rather than the lively, creative and self-generating pathways through which professionalism was implemented. Hence, the considerable amount of comment about this type of communication in the physiotherapists' accounts. It was seen as a skill which was essential from the practical point of view of implementing professionalism.

However, the data also contained evidence that this particular type of communication (dialogue) is capable of generating "new ideas". The ability to communicate in this organic way thus seems to be an essential aspect of professional work. Hence, the medical profession has recognised that it needs to train its medical students in the "art of communicating with patients".

Professional confidence was a skill identified by the physiotherapists. Confidence had been absent during the technician period where it had been associated with lack of competence, lack of leadership and the service's history of lack of success. Confidence had also been identified by some interviewees as a "driving force" for the development of new skills. It was now identified as an aspect of the new professionalism and associated with competence and success.

Given its very general description and lack of more detailed investigation of confidence in this case study, and its central importance to the physiotherapists, it merits further investigation.

From my experience as a professional I am led to speculate that "a good professional" - in particular a good clinician physiotherapist - requires to be a "confident professional person" with a good ability to communicate openly and freely in difficult situations. The ability to communicate freely and openly and being confident count as considerable professional assets in the world of work.

Finally, the use of non-technical rationality which did not fit neatly into any other knowledge strand. Schon found that, apart from using the "technical rationality" inherent in the scientific and theoretical framework, professionals use "non-technical rationality" (reflective thinking) to prepare complex and unique professional problems for problem-solving by scientific and theoretical means.

However, in Schon's work this type of professional thinking seems to be confined to the technical domain of each profession. In physiotherapy this is reflection-on-action and reflection-in-action on clinical problems as they relate to clinical physiotherapy. And although there had been evidence for this type of thinking in clinical local physiotherapy

practice, the data showed that reflective thinking was also used in the profession's non-technical domain - in organising the context to clinical activity (managing). This type of thinking is however to be distinguished from the rational kind of management thinking which had been described in the second "knowledge track", where, for example, producing a development plan was based on "rational" management knowledge (models).

### **Conclusions - the professional knowledge and skill system in physiotherapy**

The overall conclusions of my inquiries into the professional knowledge and skill system of physiotherapy are as follows. Firstly, clinical physiotherapy practice is based on a highly professionalised knowledge and skill system as outlined in the trait literature about the "properties" of profession. Professional knowledge systems being rooted in the idea of "technical rationality" in the "technical" domain of a profession does not seem to reflect the possibility of wider professional roles in organisations.

This physiotherapy knowledge and skill system, in spite of falling short of a "general theory of physiotherapy", showed much theoretical content, including the use of "competing approaches" (the use of theories). Research (the tool for theory-building) was increasingly based on its own research paradigm (physiotherapy-specific case studies). This meant that physiotherapy was likely to produce theories which are "exclusive" to the physiotherapy profession.

It seems therefore from the perspective of the present professional knowledge and skill systems that physiotherapy is a theoretically-based profession - the development of theory being the hallmark of professionalism from this perspective.

Its surprisingly high theoretical development was significant from the rational-technical point of view when we consider that the theoretical developments to the "height" of "general theory" of professions are not known due to lack of research. However, in our assessment of the state of theory of physiotherapy practice we need to consider that fact that the use of theory tends to be under-reported in professional practice (Svensson 1990).

The data demonstrated the "transfer" of sophisticated type of professional thinking from the technical (clinical domain) to the non-technical domain of physiotherapy work (organising the context to clinical work). Although transfers of knowledge and skills (generalizing) are common practice in the technical (clinical) domain of a profession, "transferring out" to the non-technical domain seems to require a higher level of knowledge and skills.



Moreover, the data showed that the two types of knowledge and skills upon which activity in the technical and non-technical domain are based, are used in a way which enhances each type of knowledge. This makes the traditional division between "those who do the work" and "those who manage" (rooted in technical rationality) appear wasteful. In physiotherapy clinical goals were more clearly defined through the use of management knowledge and experience; and managing the context to clinical work became consistent with producing a high level clinical services.

When this research project was in progress managerial goals were subordinated to clinical goals because the "ends" were always defined by clinical criteria. However, as we know from the discussion of the concept of profession, this depends on the "contingencies", which will be discussed more fully later.

The emergence of this important link between technical (clinical) knowledge and the knowledge required to manage the context to the clinical task was based on the modification of the actor-based framework - adding "knowledge of" to "knowledge about" as a professional resource. Following the demonstration of the usefulness of this expanded framework, the actor-based framework should now be modified to include both types of knowledge.

Most importantly from the point of view of contributing to our understanding of the knowledge and skill system of professions, additional categories were found in this case study of physiotherapy practice. The first is idea of "transfers" from the "technical" to the "non-technical" domain of a profession, which has already been discussed above.

Another new category was breadth of knowledge, which seems a particularly important skill in today's multi-disciplinary scenario of professional work. It refers to a professional's ability to "tap into" the body of knowledge and skills of another profession to a "degree" which makes it possible to solve professional type of problems. This requires a sophisticated level of thinking, which may also be construed as a "type of transfer" of thinking from one technical domain to another.

The ability to communicate in an "organic" pattern was identified as a new social skill. This was seen as a skill in the technical sense because there was evidence that new knowledge "emerged in conversation", backed by Svensson's research on professional discourse. The ability to communicate in this special way was also seen as a "strategic" tool. It was employed to "negotiate" within the physiotherapy service and with other professionals.

Confidence emerged as a possible new skill category of professional systems, which seems to expand the border of what constitutes a professional knowledge and skill system beyond the "technical", "non-technical" and "non-technical-rationality" sphere towards more personal characteristics. It is an expansion towards "being a professional", which might possibly become a new area of exploring professions. In professional practice personal characteristics like confidence have, for example, always been an aspect of choosing a professional for employment or for membership of the profession. The idea is that it is important for a professional to be a confident person, given the trust which is expected of clients. It is likely that clients prefer a confident professional and that their trust is enhanced if the professional is confident. Confidence might be an essential professional skill.

The practical implications of this specific knowledge pattern for implementing professionalism and managing a profession like physiotherapy in the context of an organization like the NHS will be discussed more fully in the conclusions to the "decision-making track" and "the new contingency".

### **The "decision-making track"**

The second major investigation was decision-making. This was initially based on my early evaluation of the new physiotherapy policy and management initiatives. The focus of this investigation being the degree of autonomy in physiotherapy gave this aspect of the analysis a more openly political focus. However, the question of autonomy was expanded to include questions about the structure of decision-making and of the processes associated with decision-making.

"Decision-making" therefore deals essentially with the "strategy" component of the concept of profession, including the "institutions" (professional association) as key factor in the professions' political struggle. Like knowledge ("properties"), decision-making ("strategies") was influenced by the "contingency", which, based on the analysis of policy documents, was taken to be the state's "economic" interests (Alaszewski 1978). The state's "fiscal interests" (to use Burrage's term) are connected with its concern in "regulating the professions" (Burrage 1990). Regulation means influencing the professions' "properties" and "strategies", which therefore juxtaposes the three elements (properties", "strategies" and "contingency") in a dynamic relationship.

The national policy context (the national "strategies" of the profession) contributed to the progress of the study and my understanding of the initial management problem. It was the question of how to implement autonomous decision-making (and professional type of knowledge) which prompted this study, and to which the policy analysis provided an answers. Apart from clarifying the policy details, the policy analysis gave me a political (strategic) understanding of the "resources" in a profession's armoury which are likely to have an impact on the ease and certainty with which professionalism can be implemented in organizations. This strategic understanding revolves around the key concept of "organization" of the actor-based framework and how "organization" enhances the power of the profession in the pursuit of the professions' ultimate goal: professional autonomy.

The physiotherapy policy analysis showed that the profession had fought a long, "persistent" - but relatively unsuccessful - battle to free itself from the medical profession. It was not until the state supported the CSP's efforts to gain autonomy - and "organized" physiotherapy and other similar professions under the state umbrella of the Council for Professions Supplementary to Medicine (CPSM) - that the fight for autonomy gained momentum. This was in spite of fact that the state wavered in its support for physiotherapy since the passing of the Professions Supplementary to Medicine Act (1960).

The political analysis showed nevertheless that in spite of the state's meandering, "organization" under the umbrella of the CPSM made it possible for the professions within the CPSM to - jointly - exert pressure on the state. The result was that the state gradually aligned itself with physiotherapy and the other professions, rather than the medical profession. (The professions' response to the Tunbridge Report was a good example.)

The thrust of the entire process towards independence is nevertheless likely to have been informed by economic contingencies, as Alaszewski's analysis of the state's regulation of the remedial professions had shown. The guiding motive was the "rationalization" of hospital services during the post-nationalization period.

"Organization" also emerged as the key strategic "resource" for implementing professionalism in local practice. "Organization" had come to light at the pilot stage which had shown that decision-making practices had become "organized" in a more diffuse manner. The tool for achieving this "diffuse organization" were specialist team and network structures of a particular kind - highly "organic" i.e. self-generating, flexible structures, on the basis of which it was possible to respond to the changing needs of the service and to the people working within the organization.

A key strategic local use of organization had been in the conflicts over clinical autonomy between physiotherapy and the medical profession. The physiotherapists' success in handling these conflicts was based on the "organization" of the middle layer of the service into organic team and network structures and the use of knowledge which is associated with this type of organization ("knowledge of" and "knowledge about").

It is this type of "organization" which had made it possible for the senior clinicians to make their case on clinical grounds ("knowledge of") - sound clinical reasoning being respected by another clinical profession. They also used their knowledge of how the context to clinical work was organized ("knowledge about") in making their well-reasoned case for autonomous practice. "Knowledge of" and "knowledge about", based on "organization" in team and network structures, made it possible to implement professionalism in practice i.e. the freedom to apply the profession's own knowledge and expertise in clinical practice.

The earlier discussion of the "knowledge track" had also shown each that the two types of knowledge were used in such a way that type of knowledge contributed to the growth of the other type - and the actions based on such knowledge. Clinical knowledge enhanced management knowledge (and decision-making based on such knowledge) and management knowledge (management models) refined the physiotherapists' clinical goals. Producing opportunities for clinician physiotherapists to acquire management knowledge and experience (through "diffuse organization") thus contributed to clinical knowledge and practice.

The local use of organization as a "resource" in the pursuit of autonomous decision-making highlights the limitation of the strategies negotiated by the CSP and DHSS. The two key negotiators of physiotherapy autonomy attempted to solve the question of autonomy in a typically hierarchical (bureaucratic) way. Their solution was to institute a senior management post (the district physiotherapist post) at the top of the physiotherapy hierarchy - without any recommendations or guidance about how to implement professionalism below this level. It was therefore left to the incumbents of these new posts to tackle this difficult and often conflict-ridden problem at local district health authority level. When district physiotherapists discussed their frequent problems with the medical profession with their peers at professional meetings, the solution tended to be seen in individualistic terms ("handling a difficult and troublesome consultant in the right way"), rather than as a structural issue - to be solved through a special way of "organisation".

Given the importance of the structural issue for the strategies of the profession - at that time and now in the much changed NHS - it is worthwhile summarizing the details of

"team organisation" as the backbone of "organization". The strength of team organization lay in its "diffuseness", and also in its self-generating, "organic", fluid character through which organization became more dense in a highly dynamic fashion.

"What needed to be done" to produce a "good physiotherapy service" was identified in the teams, based on the initial organization into specialisms. This is how the education, support and communication functions were self-generated by the teams, based on the intelligent, reflective identification of needs. The skills initially acquired during operational planning ("the cuts") were then "transferred" to plan and organize the solution to these problems, such as clinical education. This opened up opportunities for more communication amongst team members because training needs were discussed by all team members, rather than being decided by the team leaders. A culture of "sharing" knowledge through communication was generated, which "organized" the knowledge and expertise required for good clinical standards. Most importantly also, the most vulnerable team member - the basic grades - were supported and protected from other - sometimes hostile - professionals by opportunities for communicating problems and the sharing of expertise.

Having thus produced an answer and understanding of how the initial management problem: implementing professionalism in practice was achieved, we are now in a position to answer the theoretical question posed in the research proposal. This is about the "specific pattern" of physiotherapy as a profession, based on the analysis of national policy and local practice in one professional service, at that particular time (the mid- to late eighties and early nineties) in the NHS.

The specific pattern of the "properties" (the knowledge element) of the physiotherapy profession was the following:

- Physiotherapy had as yet not developed a "general theory of physiotherapy".
- The groundwork for building a theory "exclusive" to the profession had been identified by determining a research paradigm which was appropriate for physiotherapy research.
- Research was strongly promoted nationally through the formation of a national research organization and academic departments, as well as locally, as a way of establishing a knowledge base for the profession.
- Competing theories (approaches) were used in some physiotherapy specialisms.
- It was however impossible to determine the degree to which physiotherapy practice was on theory in a "substantive" way.

- "Science", based on technical rationality, was seen as the basis of physiotherapy practice, as outlined in the new curriculum of study 1984.
- Physiotherapy practice was firmly rooted in the use of these theories in the analysis of practice.
- Apart from the scientific elements based on technical rationality, non-technical rationality was used in physiotherapy practice (reflective thinking).
- Additional skills were identified as elements of local professional practice.
- One such skill was breadth of knowledge, which is an important skill in today's multi-disciplinary professional scenario.
- The skill to use breadth of knowledge is a specific skill within the category of "transfer skills" which also emerged as skills not described in the literature about professional knowledge and skill systems.
- The ability to "generalize" within the technical (clinical) domain had been described as a professional skill. However, the physiotherapists demonstrated what appeared to be a "higher" skill: the ability to transfer skills to the non-technical domain of the profession (to organizing and managing the context to clinical work).
- A particular form of communication (labelled "organic") was identified as a skill used in professional practice.
- Confidence was identified as a skill with the advent of professionalism.
- Communication and confidence suggested a model of professional as "a being", as opposed to a professional who "applies" a particular form of "technical" knowledge and skills.
- The professional role, identified in local practice, contained three elements: clinical, managerial and investigative, in which the managerial and investigative elements served a means for professional (clinical) ends, which were paramount at that time.
- The institutional element of the "properties" component (contained in the undergraduate syllabus of study) was largely "academic", scientific knowledge. However, at that time a fully developed post-graduate teaching structure was still not in place. It consisted of a mixture of validated/non-validated courses, M.Sc. courses etc. - a structure which is maturing with the appointment of professors of physiotherapy. Nevertheless, the post-graduate structure for the physiotherapy profession still lacks the mature and clear structure of, for example, the medical profession with its Colleges.

The specific pattern of the "strategic" (decision-making) element was the following:

- Decision-making was autonomous in the sense of being independent of the medical profession in the area of clinical and managerial decision-making.

- Decision-making was also autonomous in the sense of being independent from the contingency of the state's economic rationality because this case study of physiotherapy practice demonstrated that the goals of the service were consistent with professional (clinical) goals. The state's and the profession's goals were the same.
- The pattern of decision-making in local practice was non-hierarchical, those at the lower end of the organizational hierarchy having full responsibility for their clinical work and involvement in planning the context to clinical work.
- The pattern of decision-making (clinical and managerial) was supported by "organic", self-generating, fluid team processes, based on specialist teams at the middle layer of the organisation. The essence of "official" management roles was co-ordination by first-line managers (superintendents) and by the senior manager (the district physiotherapist). The latter role revolved around the control of resources, co-ordination of services on a district-wide basis and negotiating with agencies outside the physiotherapy service and the boundaries of the local district health authority (as described in the job description).
- The organic, self-organizing team structures were the "organising" principle in the local scenario. Diffuse, organic decision-making was the pattern of professional practice.
- From the point of view of the scope of decision-making, local practice had wide decision-making scope which encompassed: clinical, managerial decision-making (including strategic planning) and investigative (research) decisions.

This research of the broadly-based case study of the policies and practices of the physiotherapy profession therefore contributes to the ultimate aim of the sociology of the profession: building a general theory of profession.

- The study shows a congruence between the institutional (national policy) aspect of the model and professional "practice" for which "organization" was instrumental.
- "Organization" is specified as a particular kind organization: apart from being "diffuse", organization consists of "organic", fluid, self-generating organizational structures.
- The study therefore specifies the type of "organization" which was useful for implementing professionalism - a specification not made in the literature about the professions.
- In this case study of physiotherapy the two "properties" and strategies" dimensions of the concept were congruent, as they are in Hage's axiomatic theory. High complexity (a complex (professional knowledge and skill system) is associated with low centralisation (autonomous decision-making).

- This mirrors the idea of "equilibrium" in Hage's axiomatic theory.
- These generalizations apply in conditions where the state's goals (the contingency) largely coincided with the interests of the professions.

### **The "new" contingency**

The third and final part is a brief discussion of the "new" "contingency". The question "What does it all mean in today's world of professional physiotherapy practice in the NHS?" needs to be briefly explored. It has become clear that the "specific combination of properties and strategies" is "historically specific" (Torstendahl 1990). However, as the details of physiotherapy practice and policy have not been researched in this changed situation, the arguments are of a speculative kind.

As to the changed contingency, Alaszewski's (1993) recent analysis showed how the state's contingency increased dramatically, based on the inexorable rise in state expenditure on welfare services. This was coupled with the "New Right's hostility to the public sector and public expenditure which has strained the relationship between the state and the professions (Alaszewski 1993) and has resulted in a "substantial re-structuring" of this relationship. The economic contingency has become stronger.

Although initially the main focus of the state's attack was on public expenditure and the public sector, and not on the professions per se, with the Conservative Government's third term of office the emphasis shifted from control of expenditure to the role of professional groups in the process of allocating resources.

Based on the principles of tighter financial rules, reduction in restrictive practices and inspections of the quality of professional work ("Working for Patients" 1989; Community Care Act 1990), the professions came to be more tightly controlled by the state. Their former right to allocate resources was shifted to the state.

More specifically, this legislation meant that the determination of health needs had shifted from individual practitioners to the "purchasing plan" based on the assessment of health needs by the Director of Public Health. Only those services which were in the contract could be provided by individual practitioners. And coupled with the restriction in autonomy via state rules and the market system is the process of increased accountability through which professions have to provide increased information about their activities via audit systems.



The question is, "How is this likely to affect the organization of professionalism of physiotherapy in the NHS ?" It seems that, in line with the variability of the market place, the answer depends on the choice of "organisation" which physiotherapists have been able to make.

Ovretveit (1992) who has researched the organization of physiotherapy services in the new system of internal markets, lists eight possible models of organization which reflect varying degrees of professionalism in terms of physiotherapy autonomy. Although this leaves the question of knowledge largely unanswered, it would not be unreasonable to speculate on the basis of congruence between knowledge and autonomy, that knowledge might also be professional in autonomous services. Nevertheless, knowledge and expertise are now likely to be affected by "what sells in the market place".

The most independent forms of organization listed by Ovretveit are the "therapy services agencies" and "independent group practices", of which the latter are private group practices of therapists who have opted out NHS and NHS-Trust employment to form a separate business or charity.

Within the context of the NHS (Directly-managed Units) and NHS Trusts "Service Agencies" offer greatest independence since the relationship between therapy services and general management is only a "monitoring" relationship (Ham 1990). Therapy services are "linked" to a "host" Unit rather than managed by a "parent" Unit (Paxton 1990). As Ovretveit says, a "host" has less control over the "visitor" (the Service Agency) who is free to come and go within the house rules, than a "parent". Nevertheless, there is accountability to general management for the financial performance of the Agency and for quality and safety within the overall direction of the Unit of Trust.

This model seems similar to the former district physiotherapy service in scale and organization and, subject to quality being determined by the market place, this model is likely to offer the greatest degree of professionalism. It seems that professionalism might be possible in spite of the state's strong economic contingency.

At the opposite end of the scale are the "Directorates" or "Locality-managed" therapy services where therapists are employed by a provider Unit, such as a DMU or NHS Trust and managed by Clinical Directorates. Therapy services are financed and managed as part of these Directorates, and the clinical directors are frequently doctors. The disadvantage is loss of independence - clinical and managerial - and a return to technician status is feared.

In line with the new principle of the market place in health care it seems thus that the range of professionalism documented in this thesis is possible and as in the rise of professionalism in this case study, "organization" is likely to be a resource appears to be of crucial importance.

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SOUTH BEDFORDSHIRE HEALTH AUTHORITY  
DISTRICT PHYSIOTHERAPY SERVICE  
EDUCATION PROGRAMME 1985

Monday January 7th 1p.m.

1. Report back from day course - "Haemophilia"  
Nicola Grosvenor M.C.S.P.
2. "Mini Tracheotomy"  
Jackie Shaw M.C.S.P. / Linda Foreman M.C.S.P.

Physiotherapy Department  
Luton and Dunstable Hospital

Monday January 14th 1p.m.

"Developing the Physiotherapy Service in your particular area - planning"  
Rita A-Renner M.A. (Hons), M.Sc., S.R.P. / Jackie Shaw M.C.S.P.

Physiotherapy Department  
Luton and Dunstable Hospital

Monday January 28th 1p.m.

"The Role of the District Physiotherapist vis-à-vis the Superintendent  
Physiotherapist"  
Rita A-Renner M.A. (Hons), M.Sc., S.R.P. / Elaine Smith M.C.S.P.

Physiotherapy Department  
Luton and Dunstable Hospital

Monday February 4th 1p.m.

"E.C.G.'s"  
Mrs. M. Strange - Head of E.C.G. Department Luton and Dunstable Hospital

Physiotherapy Department  
Luton and Dunstable Hospital

Monday February 11th 1p.m.

"Skin Cover in Hand Injuries"  
Mr. P. J. Smith F.R.C.S. - Consultant Plastic Surgeon Mount Vernon Hospital

Seminar Room - Post Graduate Medical Centre  
Luton and Dunstable Hospital

Friday February 15th 1p.m.

"Multiple Sclerosis"  
Dr. A. Gale F.R.C.P. - Consultant Neurologist

Physiotherapy Department  
Luton and Dunstable Hospital

Monday February 25th 1p.m. - (Open Meeting)

"Electrical Methods to assess injury and regeneration in nerve fibres"  
Mr. G. Mott - Department of Medical Physics Mount Vernon Hospital

Physiotherapy Department  
Luton and Dunstable Hospital

Monday March 4th 1p.m.

"Endocrine Investigations - and others"  
Sister H. Baker - Luton and Dunstable Hospital

Physiotherapy Department  
Luton and Dunstable

Monday March 11th 1p.m. - (Open Meeting)

"The Multiple Sclerosis Society in Israel"  
Dina Ajlenberg M.C.S.P.

Physiotherapy Department  
Luton and Dunstable Hospital

MEETING  
CANCELLED

Monday March 18th 1p.m.

"The Multiple Sclerosis Group at Luton and Dunstable Hospital"  
(Based on work at The Arms Research Unit)  
Juliet Johnson M.C.S.P. and Linda Murray M.C.S.P.

Physiotherapy Department  
Luton and Dunstable Hospital

Monday March 25th 2p.m. and 3.30p.m.

"Resuscitation"  
Mrs. M.R. Currie - Clinical Teacher Luton and Dunstable Hospital

These are practical sessions and will take place in the School of Nursing  
Luton and Dunstable Hospital

Monday April 1st 1p.m.

"Physiotherapy for Paediatric Respiratory Conditions"  
Nicola Grosvenor M.C.S.P.

Lecture Theatre - Post Graduate Medical Centre  
Luton and Dunstable Hospital

Monday April 8th - Bank Holiday

Friday April 19th 1p.m.

"Local Provision for Handicapped Children"

Dr. E. de H. Lobo - Consultant Paediatrician Luton and Dunstable Hospital

School of Nursing

Luton and Dunstable Hospital

Monday April 22nd 1p.m. - (Open Meeting)

"Physiotherapy for Multiple Sclerosis"

Lorraine De Souza M.Sc., M.C.S.P. - Research Physiotherapist Middlesex Hospital

Lecture Theatre - Post Graduate Medical Centre

Luton and Dunstable Hospital

Monday April 29th 1p.m.

"Research Evidence concerning strokes"

Rita A-Renner M.A. (Hons) M.Sc., S.R.P.

Physiotherapy Department

Luton and Dunstable Hospital

Monday May 6th - Bank Holiday

Monday May 13th 2p.m. - 4p.m. - (Open Meeting)

"Physiotherapy Management of Handicapped Children"

David Scruttan M.Sc., M.C.S.P. - The Newcomer Centre Guys Hospital

Physiotherapy Department

Luton and Dunstable Hospital

Monday May 20th 1p.m.

"Respiratory Conditions in Children"

Dr. M. J. Chapple - Consultant Paediatrician Luton and Dunstable Hospital

Physiotherapy Department

Luton and Dunstable Hospital

Monday May 27th - Bank Holiday

Monday June 3rd 4p.m. - (Open Meeting)

"A Specific Approach to the Profoundly Handicapped"

Miss L. Weekes M.C.S.P. / Mr. A. Wigram - Music Therapist

"The Playroom" Childrens Unit

Luton and Dunstable Hospital

Monday June 10th 1p.m.

"The Managerial and Professional role of Senior Physiotherapists"  
Rita A-Renner M.A. (Hons) M.Sc., S.R.P.

Physiotherapy Department  
Luton and Dunstable Hospital

Monday June 17th 1p.m. - (Open Meeting)

"Mental Handicap - A Physiotherapists Point of View"  
Stephanie Fripp M.C.S.P.

Physiotherapy Department  
Luton and Dunstable Hospital

Monday June 24th 1p.m.

"Chiropody"  
Mrs. M. Ivory F.R.Ch., M.Ch.S. - Sector Chiropodist

Physiotherapy Department  
Luton and Dunstable Hospital

Monday July 1st 4p.m. - (Open Meeting)

"A day in the Life of a School Physiotherapist"  
Ann Lewis M.C.S.P.

Lecture Theatre - Post Graduate Medical Centre  
Luton and Dunstable Hospital

Monday July 8th 4p.m. - (Open Meeting)

"Hyperventilation"  
Miss D. Innocentie M.C.S.P. - Superintendent Physiotherapist Guys Hospital

Physiotherapy Department  
Luton and Dunstable Hospital

Monday July 15th 1p.m.

"Nursing Care of Acutely Ill Babies"  
Sister H. Colman Luton and Dunstable Hospital

Physiotherapy Department  
Luton and Dunstable Hospital

Monday July 22nd 1p.m.

"The Role of the Senior Physiotherapist"  
Rita A-Renner M.A. (Hons) M.Sc., S.R.P.

Physiotherapy Department  
Luton and Dunstable Hospital

## Appendix B

### Key ideas of systems theory as the context to axiomatic theory

Axiomatic theories are a theoretical development in the tradition of systems theory and functional-structuralism, which have been the dominant schools of organization (Silverman 1970), and have influenced contingency theory (Woodward 1965; Lawrence and Lorsch 1967; Thomson 1967).

Based on the principles of General Systems Theory, developed by theoretical biologist Ludwig van Bertalanffy, systems approaches conceptualize organizations as organisms (or living systems) which exist in a wider environment, and are in continuous exchange with the environment - the exchange being crucial to sustaining the life and form of the system. Adaptation are therefore the means for survival.

Axiomatic theories are then a specific way of thinking about organizations as systems, but this system is "in axiomatic format" (Hage 1965), of which "various kinds" exist (Zetterberg 1963). The axiomatic theory used in this study was originated by H.L. Zetterberg, modified by Hage and operationalized by Pugh and Hickson.

The idea of a system (or organization) "adapting" to the environment means that the system is "open" and characterized by a continuous cycle of input, internal transformation, output and feedback, whereby one element of experience influences all other contained in the system.

These processes are linked to the idea of "homeostasis" ("equilibrium" in axiomatic theory), which refers to self-regulation and the ability to maintain a steady state. Organisms and organisations are in a state of equilibrium when different parts of the system (or variables) are in a state of congruence. The structural elements, or variables, are thus assumed to be interrelated in such a way that they service the achievement of organisational goals. In this sense they are "functional", and the identification of lack of congruence eliminates potential dysfunction.

To organize in a way that meets the requirements of the environment is the focus of "contingency theory" and in the practice of organizational development where the need for careful management to satisfy and balance internal needs and to adopt to environmental circumstances is stressed.

This description of systems theory as the context to axiomatic theory is based on an account of systems theory by Morgan (1986).

The details of axiomatic theory are outlined in the main text.

## DEFINITION OF HIGH STANDARD

N.B. Difficult to define precisely

In relation to rehabilitation of stroke patients:-

1. Ability to conduct thorough assessment  
analysis of problems
2. Decide priorities for individual patients
3. Plan time according to priorities
4. Apply appropriate treatment techniques
5. Ability to progress treatment
6. Flexibility worked into the system
7. Ability to motivate patient
8. Good communications with patient, relatives etc
9. Close working relations with other relevant disciplines
10. Accurate recording of notes



STROKE CARE POLICY

Purpose

To establish and maintain an excellent standard of rehabilitation for stroke patients

Goals

<p>To provide a high standard of physiotherapy treatment.</p> <p>↓</p> <p>Involves quality of resources and skills related to needs.</p> <p>↓</p> <p>Need to define "high standard".</p>	<p>2. To co-ordinate the nursing and physiotherapy care services.</p> <p>↓</p> <p>Patient - oriented combined approach.</p>	<p>3. To obtain and develop a suitable location for patient rehabilitation.</p>	<p>4. To develop a Stroke Unit.</p>	<p>5. To provide a caring and counselling service.</p>	<p>6. To monitor and evaluate the implementation of the policy.</p>
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1. TO PROVIDE A HIGH STANDARD OF PHYSIOTHERAPY TREATMENT

TO DO

METHODS AND DATA REQUIREMENTS

- i) Assess caseload
- ii) Assess staffing levels
- iii) Evaluate required staffing levels related to caseload
- iv) Assess existing staff skills
- v) Provide opportunities for developing skills
- vi) Assess and provide adequate space and equipment for rehabilitation.

- i) Collect statistics - number of patients; mean and range, age, sex, length of stay
- ii) Collect data on existing number of staff
- iii) Relate above data to Vallow Report
- iv) Knowledge of previous experience  
Appraisal of application of skills
- v) Encourage attendance at courses  
Staff training at work  
Set specific standards to be achieved by each physiotherapist
- vi) Relate to caseload and staffing levels and required standard of rehabilitation

DISTRICT PHYSIOTHERAPY SERVICEMaking a Development Plan in Your  
Area of Service

A.

BASIC QUESTION Where would you like your service  
to be at some point in the future?

B.

Questions you have to ask yourselves:

1. What is the present service like -  
Description of Present Service
2. What is wrong with the present service.
3. How do I put it right.
4. If I put it right would that be adequate

OR Do I want more?

BUT your questions may have to be modified in accordance with your particular patch. One factor influencing the quality of service you can aim for are the present INEQUALITIES IN RESOURCES in different Units e.g.

Medical Team: very adequate nursing staff

St. M: poorly staffed

BUT: useful to know what your IDEAL is.

RELEVANCE OF DEVELOPMENT PLANS  
TO TODAY'S N.H.S.

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1. The introduction of a business management ethos and management techniques into the N.H.S. i.e. the implementation of the Griffith Report.
2. Survival and progression of the remedial profession.
3. The "Personal View": Progression and development makes work more interesting.

GROUP EXERCISE

(to be completed in 5 minutes)

1. What is wrong with the present service?
2. How can I put it right?
3. If I put it right would that be adequate?
4. Or Do I want more?

# DEVELOPMENTAL PLANNING MODEL

## LEVEL II

## PURPOSE - Overall Goal

- 11) Philosophical concept - pertains to values - is "general"  
- is "vague"
- 12) May have to be quantifiable in some way

## GOALS

- 1) Are more SPECIFIC than PURPOSES
- 2) Are limited in TIME and SPACE

Sufficient  
Staffing Levels

Specify what  
Sufficient means  
in your/this context

To Dos  
or  
Tasks

To Dos  
or  
Tasks

To Dos  
or  
Tasks

Adequate Accommodation

10

1000 JOURNAL OF CLIMATE

\_\_\_\_\_

1000

## QUALITY INITIATIVES IN THE PHYSIOTHERAPY SERVICE

### 1. DISTRICT-WIDE INITIATIVES

a) Analysis of the physiotherapy service which RELATES THE JOB SATISFACTION OF PHYSIOTHERAPISTS TO ORGANISATIONAL STRUCTURE (management style) in the service. The project charts the progress of individual practitioners towards 'mature professionalism' and the resulting improvements in the quality of the service. This is a Ph.D. thesis registered at Cranfield Institute of Technology which is to be completed by the end of 1989.

### b) PHYSIOTHERAPY TRAINING and EDUCATION PROGRAMMES

A weekly education programme on specific clinical subjects as well as on managerial and professional issues is available to all physiotherapists working in the District Physiotherapy Service of South Bedfordshire Health Authority. It takes place at Monday lunchtime and a research project on physiotherapy organisation shows that it has produced a sense of identity with the physiotherapy service as a system; it promotes group processes such as the exchange of ideas, the broadening of the knowledge base in physiotherapy; it facilitates patient referral to practitioners with the highest level of knowledge and expertise and thus enhances the quality of care throughout the physiotherapy service. The programme is circulated to other members of the organisation and they are able to attend selected sessions.

### c) CLINICAL SPECIALTY TRAINING

Clinical tutoring sessions are conducted in all, or most, specialty areas of physiotherapy to promote the knowledge and expertise of physiotherapy practitioners. This produces team cohesion, stimulates critical/analytical thinking and provides members of the specialty teams with opportunities to learn how to teach. The programme of clinical tutoring is drawn up in advance and circulated throughout the physiotherapy service and is thus open to all physiotherapists for the updating of clinical knowledge and expertise.

### d) TRAINING AND PERSONAL DEVELOPMENT PLANS FOR BASIC GRADE (ROTATIONAL) PHYSIOTHERAPISTS

These plans are drawn up through discussion and mutual agreement between each Basic Grade Physiotherapist and the most senior physiotherapist managing the specialist area for the period of attachment (rotation) to the specialist area. Reviews take place at the middle and end of the rotation.

The same scheme is applied to physiotherapy students.

### e) DEVELOPMENT PLANNING FOR THE PHYSIOTHERAPY SERVICE

For the past three years the physiotherapy service has produced development plans for each specialist area. These plans are evolved through discussion and mutual agreement with all members of the specialist team and superintendent physiotherapists and the District Physiotherapist. They are a vehicle for producing a regular review of the service and forward momentum. They also produce commitment to the service and enhance the professional and planning skills of physiotherapy practitioners.

f) RESEARCH AND EVALUATION GROUP

A group for all physiotherapists interested in research and in evaluating physiotherapy practice has been formed as a support group for those involved in the activity and to co-ordinate and systematise these activities. The group will address itself to creating a data collection system which will underpin and facilitate research and evaluation activities.

/continued on next page



## 2. OUT-PATIENT SERVICES

### a) MONITORING WORKLOAD/CASELOAD IN PHYSIOTHERAPY OUT-PATIENT SERVICES

- i) Demand from various sources
- ii) Workload/Caseload of physiotherapists supplying out-patient services.  
(see also c (ii)).

Project to be reviewed to determine future direction of data collection.

### b) 'DID NOT ATTEND' STUDY

The purpose of this recently started study is to ascertain the reasons for patients not attending for appointments sent to them by the physiotherapy out-patient service. The letter usually sent after non-attendance was revised to enquire into the reasons for non-attendance in terms of :

- i) has your problem been resolved,
- ii) were you unable to attend,
- iii) has your doctor advised you not to attend,
- iv) other reasons (please specify).

There has been a reduction in non-attendance since the study was begun but the longer-term effects require to be monitored.

### c) MONITORING OF THE WAITING LIST FOR OUT-PATIENT SERVICES

- i) Monitoring of 'Urgent' and 'Non-Urgent' categories of patients waiting for treatment.
- ii) Monitoring of 'patients discharged by month'. From this, average and individual care-loads can be calculated and possible inefficiencies of individual practitioners can be investigated. Project on-going.

### d) AN INVESTIGATION INTO THE EFFICIENCY OF THE AMBULANCE SERVICE TO THE PHYSIOTHERAPY OUT-PATIENT DEPARTMENT.

An investigation into 'late-arrivals' or 'failure-to-arrive' and consequent agreements reached between the physiotherapy service and the Bedfordshire Ambulance Service led to a solution of the problem by a change in information supplied to the Ambulance Service and improved planning of patients' collection. Project concluded.

### e) STUDY OF THE EFFECTS OF TREATMENT WITH TRANSCUTANEOUS NERVE STIMULATION (TNS) ON PATIENTS SUFFERING FROM CHRONIC PAIN.

In this study, patients who have suffered from pain for more than 12 months; who have no musculo-skeletal problems and who have not responded to four previous physiotherapy treatment modalities are investigated after treatment with TNS by scoring a line diagram concerning the amount of pain present after TNS treatment following a six-month interval. Study in progress. Proposed end of study in 1 to 2 years.

### f) BACK SCHOOL STUDY

This study analyses the efficiency of the Back School in terms of the usefulness of the information supplied by the School. The criteria used are:

- i) the ability of the client to use the information supplied both at home and at work,
- ii) the client's ability to control pain.

The process of evaluation is by questionnaire. The study commenced in September 1988.

### 3. INTENSIVE CARE/SURGICAL AND ORTHOPAEDICS

- a) A review of the physiotherapy service to the Intensive Care Unit and Surgical Wards has been carried out and this resulted in the SETTING OF CLINICAL CRITERIA for patients to be treated, not to be treated, or advised only. These criteria include, for example, : age, smoker/non-smoker/ type of condition.

#### b) EVALUATION OF THE EMERGENCY AND ON-CALL SYSTEMS

Data have been collected on the following aspects of the on-call system:

- i) number of arranged calls,
- ii) calls by doctors,
- iii) necessary/unnecessary calls,
- iv) number of calls in each specialty during the last three years.

The service pattern of the past three years has been established and a report is in the process of being compiled.

- c) A SPECIALIST TRAINING SYSTEM for all physiotherapists participating in the on-call and emergency system is in operation. All new staff are given training before undertaking on-call duties. Regular respiratory update sessions are also carried out.

#### d) SPECIALIST WALKING TRAINING GROUP FOR AMPUTEES

A systematic review of services to patients who have had amputations was carried out four years ago and subsequent reviews have led to an intensive rehabilitation service of a high standard and good communication with ALAC. Each patient is periodically reviewed and an individual care development plan is produced.

#### e) POST-MASTECTOMY LYMPHOEDEMA

A literature search has been carried out to establish the patients' needs.

- f) A STUDY INTO THE EFFECTS OF DEVELOPMENTS IN THE ORTHOPAEDIC AND ACCIDENT DEPARTMENTS ON THE PHYSIOTHERAPY CASELOAD/WORKLOAD OF THE OUT-PATIENT PHYSIOTHERAPY DEPARTMENT AT THE LUTON AND DUNSTABLE HOSPITAL.

This study, which started in November 1986 and has been concluded recently, has assessed the need for physiotherapy for patients located in the Day Case Unit and physiotherapy workload generated by the Accident Service. This rather complex study is being evaluated and a report will be sent to the Unit General Manager.

#### g) ORTHOPAEDIC OUTLIERS

A study is being carried out to determine the number of orthopaedic outliers in the surgical wards; the number of treatments provided by physiotherapists per month and per day, and how these changes affect the physiotherapy service.

4. MEDICAL REHABILITATION

- a) An assessment of the need for a STROKE UNIT at the Luton and Dunstable Hospital has been carried out and a two-year follow-up of the original study demonstrated the paucity of the original short-term study for planning purposes. The study requires further evaluation and has been discontinued because of maternity leave.

b) SURVEY OF PATIENTS SUFFERING FROM RHEUMATOID ARTHRITIS

This study aims to determine the level of need for physiotherapy services of this client group and the group's desire for a self-help and/or support group. A questionnaire is being compiled.

- c) A Study of The EFFECTS OF THE CLOSURE of the PHYSIOTHERAPY REHABILITATION DEPARTMENT AT THE LUTON AND DUNSTABLE HOSPITAL demonstrated the detrimental effect on services available to patients requiring rehabilitation as a result of geographical location and its effect on staff morale and staff training.

d) CARDIAC REHABILITATION

A study has been carried out to assess the needs of patients having had a cardiac infarction for cardiac rehabilitation. This was followed by a pilot scheme which demonstrated the need for such a scheme. The project has been discontinued because of maternity leave.

e) PULMONARY REHABILITATION

A pulmonary rehabilitation scheme has been introduced to the medical wards after a library search and a trial is in progress.

5. SERVICES TO GERIATRIC PATIENTS

- a) AN EVALUATION OF PHYSIOTHERAPY SERVICES TO PATIENTS SUFFERING FROM PARKINSON'S DISEASE.

A study of the physiotherapy needs of patients suffering from Parkinson's Disease and the needs of carers for physiotherapy advice is being carried out at the new Parkinson's Disease Out-Patient Clinic at St. Mary's Hospital. It is also proposed to establish a register of patients in this category. The study is in its early stages.

- b) The physiotherapists supplying a service to the Elderly Care Wards of the Luton and Dunstable Hospital are carrying out an evaluation of DOMICILIARY FOLLOW-UP SERVICES FOR PATIENTS WHO HAVE HAD A STROKE. A questionnaire has been compiled.

- c) A physiotherapist working with ELDERLY MENTALLY INFORM PATIENTS is undertaking a project to determine the nature of the physiotherapist's role in this specialty. This is being carried out as a project for a post-graduate qualification.

Rita A-Renner,  
District Physiotherapist

25.10.88